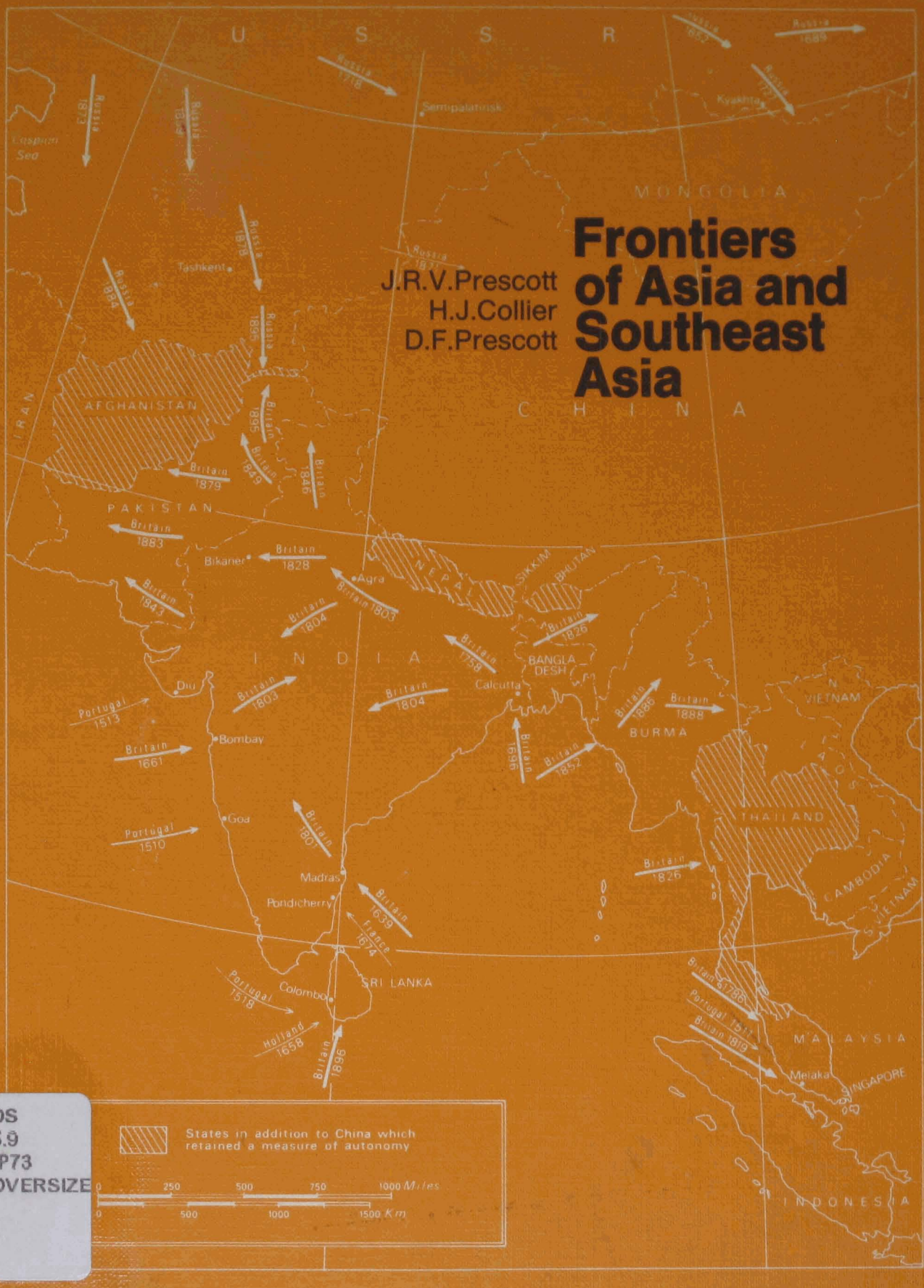

Frontiers of Asia and Southeast Asia

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MELBOURNE UNIVERSITY PRESS
1977

First published 1977
Printed in Australia by
Wilke & Co. Ltd., Clayton, Victoria, 3168, for
Melbourne University Press, Carlton, Victoria, 3053
U.S.A. and Canada: International Scholarly Book Services, Inc., Box 555, Forest Grove, Oregon 97116
Great Britain, Europe, the Middle East, Africa and the Caribbean:
International Book Distributors Ltd (Prentice-Hall International),
66 Wood Lane End, Hemel Hempstead, Hertfordshire HP2 4RG, England

National Library of Australia Cataloguing in Publication data
Prescott, John Robert Victor, 1931– .
Frontiers of Asia and Southeast Asia.
Index.
ISBN 0 522 84116 3.
1. Asia — Boundaries — Maps. I. Collier,
Harold John, 1911– , joint author. II. Prescott,
Dorothy Francis, 1931– , joint author. III. Title.
912.5

Contents

Preface

This atlas deals with the land and maritime boundaries of Asia and southeast Asia from colonial times to the present. With the exception of Sikkim and Macau each international boundary is the subject of at least one map. Sikkim's boundary with India has not been shown because that territory is now effectively part of India. The boundary between China and Macau has not been shown for two reasons: first it is only 274 m (300 yds.) long across the narrow isthmus of Ferrerra do Amaral, and second because Macau's separate identity is by courtesy of the Chinese authorities. Even though the territory formerly known as Portuguese Timor is now part of Indonesia, the evolution of its former limits is described because there does not appear to be any earlier account in English.

The authors are grateful to the Board of Management of Melbourne University Press for the suggestion that they should prepare this atlas, and thank Ruth Terrell and Vicki Jessen for typing the manuscript so accurately and quickly.

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D. F. Prescott

University of Melbourne
September 1976

Note on place names

Place names used in this work have been taken from the United States of America Board on Geographic Names Gazetteers, and failing these, from the *Times Atlas of the World* (comprehensive edition, 1972). Place names of an historic nature not featured in either of these sources were obtained from the texts and maps of the original treaties.

Lacking a more recent listing the source used for Indonesian names was the second edition U.S.B.G.N. (1968) gazetteer. Indonesian names in this atlas therefore reflect the spelling in use before Indonesia officially proclaimed a new spelling system in August 1972. The principal letter changes in the new system are dj to j, j to y, tj to c, sj to sy, and ch to kh. As a result many geographic names have been changed. Users of this work are alerted to this fact, which explains why discrepancies will be found in the form of geographic names used in these maps compared with works incorporating the new spelling system.

Chinese names used in the text and maps are romanized according to the modified Wade-Giles transcription system as authorized by the United States of America Board on Geographic Names. There are strong arguments for retaining this form of transcription but the major reason is that all official American and British maps, charts and gazetteers of China use this system. Therefore in order to use this publication with existing reference material the Wade-Giles system has been adopted. An attempt has been made to provide as many names as possible in the new auxiliary Pinyin system of romanized spelling now being promoted by the Chinese government, in a separate list of Chinese names which gives the Wade-Giles with Pinyin equivalents.

Tibetan, Uighur and Mongolian place names cause some problems in transcription into Pinyin, and variant renderings can occur. Unfortunately rules for the application of Pinyin to geographical names do not yet exist, thus variants of the same name may be found in different atlases. The table of Wade-Giles/Pinyin equivalents is offered as an aid to those readers who might need to compare spellings in the two systems. The authority used for the compilation of this list was 'Zhongua renmin gongheguo ditu' [Map of the People's Republic of China] Hanyu pinyinban di 1 ban [1st edition, Hanyu Pinyin] Beijing, Ditu Chubanshe bianzhi chuban, 1974. [Peking, The Cartographic Publishing House, 1974.] 1:6,000,000 *and* 'Zhongua renmin gongheguo ditu. Hanyu pinyinban di 1 ban. Diming suoyin'. 1974. [Map of the Peoples' Republic of China. 1st edition Hanyu Pinyin. Index to geographic names. 1974.]

Glossary

Unusual terms

aeolian	relating to wind
baseline	the line from which maritime claims are measured
condominium	a territory jointly administered by two countries
delimitation	the definition of a boundary on a map or in a document
demarcation	the marking of a boundary in the landscape
glacis	the near slope of a mountain range
interfluve	a plain separating two rivers
intermontane	surrounded by mountains
isobath	a contour of the sea-bed
jihad	a holy war
karez	the plural of khanat
karst	limestone country with underground drainage
khanat	an underground irrigation canal
line of equidistance	a line which is always equidistant from the nearest points of opposite or adjacent coasts
maritime league	three nautical miles
nautical mile	one minute of latitude (1852 metres)
pedicle	a narrow strip of territory
permafrost	permanently frozen subsoil
rejuvenation	the lowering of the base to which a river is flowing, causing increased erosion
ryot	a peasant
shifting cultivation	the farming of areas until yields decline and then the abandonment of those areas to allow natural regeneration
tahsil	a small administrative unit in the Punjab
thalweg	the deepest continuous channel
thana	a small administrative unit in Bengal

NOTE: All quantities in parenthesis ( ) in text are imperial values

Foreign geographical terms

ab	stream, lake, spring, well
altay	mountain range
baia	bay
ban	village
band	dam, lake, mountain range
batang	stream
bel	pass
boeng	lake
buket	hill, mountain
bukit	hill, mountain
bum	hill, mountain
cao nguyen	plateau, mountain
chah	well
changwat	first order administrative division, Thailand
chiang	stream
ch'ih	lake
ch'on	stream
chong	pass
chuan-ch'u	administrative division (special district), China
co	mountain, hill
col	pass
con	island
dak	stream
dam	cove, bay, lake
dao	island
dar	stream
darya	stream
daryacheh	marsh
dasht	plain, desert, depression
davan	pass
dawan	pass
do	island
doab	interfluve
don	island
dong	mountain
feng	mountain
gali	hill
gang	stream
ghar	mountain
gol	stream
gowd	depression
gunong	mountain
gunung	mountain
hai	bay, lake
hamun	lake, lake bed, stream
hawng	stream
ho	stream
hoi	marine channel
hon	island
houei	stream
hsien	second order administrative division, China
hu	lake, marsh
huai nam	stream
hwe	stream
ilha	island
ilot	island
kaap	cape
kaur	stream
kepulauan	islands
kinh	canal
khlong	stream
khong	mountain
ko	mountain (Laos)
ko	island (Thailand)

koh	mountain
kok	point
kowl	lake
kray	administrative division, U.S.S.R.
krebet	mountains
kuala	stream
kuh	mountain
kum	sand area
kwan to	islands
la	pass
laem	point
lam	stream
lam nam	stream
lar	pass
laut	sea
lol	mountain
lubok	pond, pool
mae	stream
mae nam	stream
more	sea
moron	stream
mota	stream
nam	stream
nan	stream
ngoc	mountain
noe	stream
noll	stream
nui	mountain, hill
nuur	lake
oblast	administrative division, U.S.S.R.
orgil	peak
ostrov	island
ozero	lake
pegunongan	mountains
pegunungan	mountains
p'enti	basin
pereval	pass
peski	desert, sands
phanom	mountain, hill
phnom	hill
phou	mountain
phu	mountain
pik	peak
poelau	island
ponta	point
porto	port, harbour
pou	hill, mountain
poulu	islands
prek	stream
protoka	channel
pulau	island
pulau-pulau	islands
pulu	reef
qal'eh	fort
rach	stream
rechka	small stream
rio	stream
rowd	stream
rud	stream
san	mountain
sardoba	well house
selat	strait
selseleh	mountain range
sha	island, shoal
shan	mountain
shan-k'ou	pass
shelah	stream
sheng	first order administrative division (province), China
shui-tao	channel
song	stream
ssu	monastery
stoeng	stream
stung	stream
su	stream
sungai	stream
suoi	stream
tagh	mountain range
tandjung	cape, point
tanjong	cape, point
tao	island
t'ao	bay
tappeh	hill
tau	mountain range
tayga	mountain range
teluk	bay, cove
tivu	island
tonle	stream
tzu-chih-ch'u	first order administrative division (autonomous region), China
up	populated place
us	well, spring, lake
uul, uula	mountain, mountain range
vadi	stream
vam	tidal creek, stream mouth
vinh	bay, bight, cove
wai	stream
wan	bay, harbour
xe	stream
yoma	hills, mountain range
zaliv	bay

1 Introduction

In 1904 Mackinder delivered a famous lecture in which he sought 'a formula which shall express certain aspects, at any rate, of geographical causation in universal history' (Mackinder, 422). Mackinder was not a crude determinist, but he was concerned with the constraints which the physical landscape placed on human, economic and political activity. While he concentrated on the heartland of Asia, which constitutes the continental and arctic drainage basins of Afghanistan, the Soviet Union and Mongolia, had he shifted his focus eastwards he would have found plenty of evidence of the relationships between geography and the formation of empires. A similar study today will show important correlations between geography and the extent of the independent states which succeeded those empires.

Asia is the largest of the continents, and the portion with which this atlas is concerned has a symmetrical structure. (See maps 1a, 1b, pp.2–3.) The continental interior consists of high plateaus in the Pamirs and Tibet, from which radiate ranges of high mountains. This area also contains major deserts such as the T'a-li-mu P'en-ti, the Peski Karakumy and the Peski Kyzylkum. Flanking this interior core on the south and east are the peninsulas of Asia. The peninsulas of India, Malaya, Indo-china, eastern China and Korea, defined by the deep embayments of the Arabian sea, the bay of Bengal, the gulfs of Thailand and Tonkin, the East China sea and the sea of Japan, provided targets for the imperial powers of Europe and Japan equipped with strong navies. The third territorial tier is provided by the offshore islands and archipelagos stretching from Sri Lanka in the south, through Indonesia, Papua New Guinea, the Philippines, and Taiwan, to Japan in the north. With the exception of Japan, the islands, like the peninsulas became strategic and commercial goals for the imperial powers, and then the seats of independent nations.

Asia's present political boundaries evolved in three phases. (See maps 1c, 1d, pp. 4–5.) In the period to 1914, the colonial powers Britain, France, the Netherlands, Japan, Portugal, Russia and the United States of America carved out their Asian empires. Britain, France, Japan and Russia dominated the Asian mainland around the hub which was China. Japan was concerned with the Korean peninsula; Russia was engaged in the area from Vladivostok to Afghanistan; Britain's sphere occupied the Indian and Malayan peninsulas; and France was active in Indo-China. Britain, France, Portugal and Germany also acquired small footholds on the Chinese peninsula at Hong Kong, Chan-chiang, Macau and Chiao-hsien respectively. In the offshore islands Britain, the Netherlands, Germany, Portugal and Japan established maritime empires by purchase and conquest at the expense of the indigenes, while the United States of America became military heir to the Spanish empire of the Philippines. During this phase the indigenous Asian states played minor roles in fixing the various international boundaries. Afghanistan, Bhutan, China, Nepal and Thailand survived as independent or semi-autonomous states, but they all had boundaries imposed on them. Apart from the Sino-Russian negotiations of 1689 and 1727, the Asian governments always negotiated from a position of weakness. The emir of Afghanistan must have suffered acute depression as Britain bungled the boundary negotiations with Russia which inexorably advanced along the Amu Darya and Hari Rud valleys. France bullied Thailand into yielding large areas of territory which today form parts of Cambodia and Laos. Indeed these small states enjoyed a measure of autonomy only because the British authorities had a passion for interposing buffer states between British India and the empires of France and Russia and China. The colonial powers tried to achieve strong, secure boundaries which were also easy to supervise and administer; unfortunately the information on which their decisions were based was frequently inaccurate. In New Guinea straight boundaries were driven through areas for which there was no precise or reliable information. Also during this period the British and French governments established the internal administrative boundaries of India, Borneo and Indo-China; more recently these limits have provided the lines of cleavage along which the independent countries have separated from each other.

The second period of boundary construction lasted from 1914 until the end of World War II. During this phase the *status quo* was preserved. There were some small alterations but none had any great significance. For example in 1921 Britain dictated a boundary to Afghanistan through the Khyber pass. In 1935 a Turkish general acted as arbitrator between Iran and Afghanistan and produced a boundary which filled in the gap left by the British arbitrations in Sistan and Hashtadan. The efforts of Japan to redraw the boundaries of its ally Thailand during the 1940s failed.

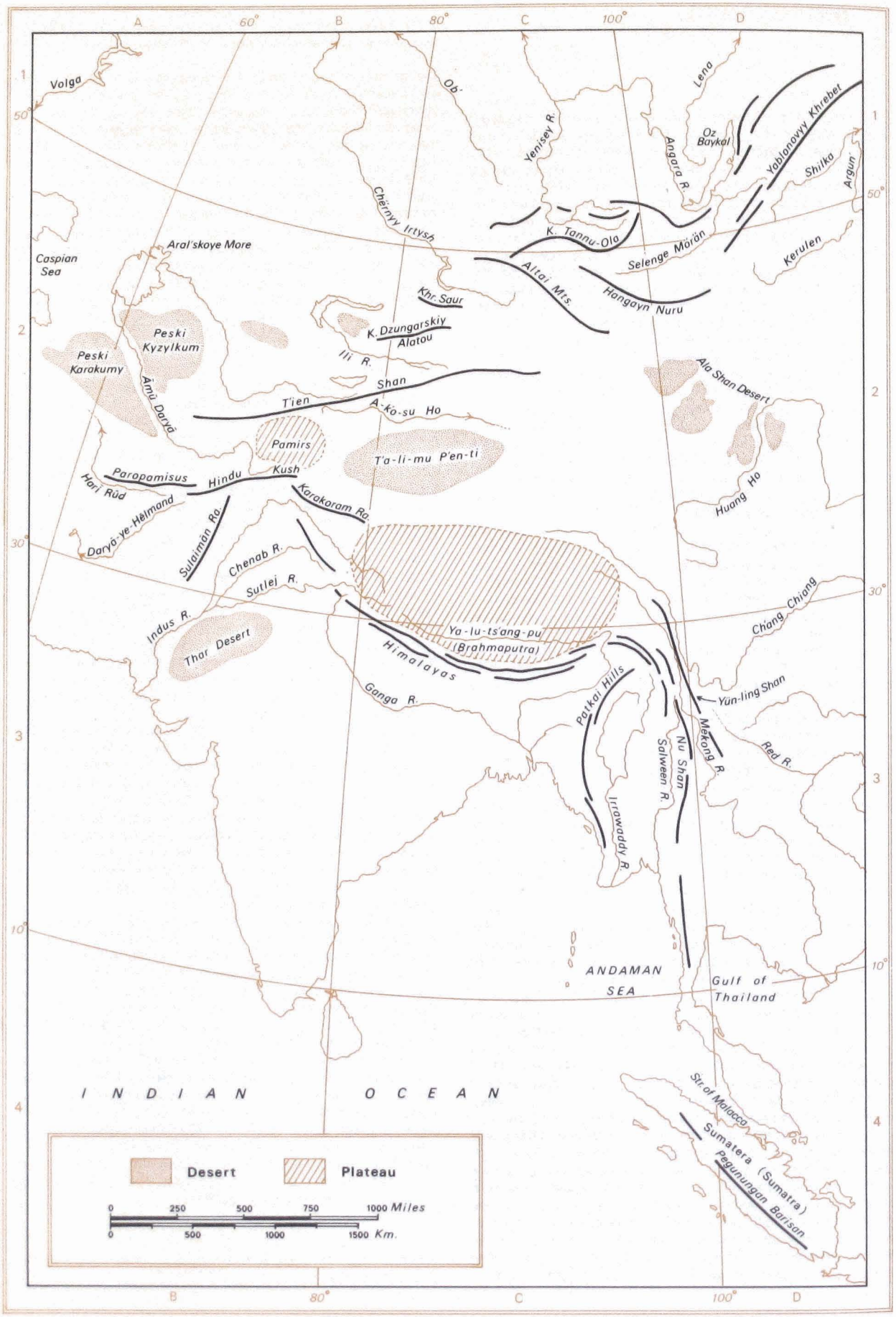
Since 1945 the new wine of Asian nationalism has been poured into the old wineskins provided by the colonial boundaries. This third period has witnessed the decline of all the empires with the exception of that belonging to the Soviet Union, suggesting that contiguous empires based on strong armies are more enduring than overseas empires based on strong navies. The Soviet Union has been even more successful than Czarist Russia in preserving its territorial integrity. Czarist Russia sold Alaska and retroceded the Ili valley to China in 1881, whereas the Soviet Union has preserved Russia's boundaries in the east and extended them significantly in the west. In this period China has moved from a position of serious internal weakness to one of considerable strength and its hold over peripheral areas has been re-established beyond any doubt. Boundary evolution in this period has been marked by five main characteristics. First, new independent states have emerged within the internal boundaries established by Britain and France. The boundaries of Pakistan and Bangla Desh with India, and the common boundaries of Vietnam, Cambodia and Laos provide cases of provincial boundaries raised to international status. Second, a number of Asian states have negotiated new boundary treaties with each other. China has been in the forefront of this move by concluding agreements with Mongolia, Afghanistan, Pakistan, Nepal and Burma. In all cases the new lines represent only small deviations from the former colonial boundaries, but the important difference is that the treaties governing them have been negotiated between equal, independent Asian states. Some of these treaties have been concerned with the smooth and efficient administration of borderlands, not with any territorial transfer.

Third, some boundary disputes have emerged between Asian states. India and China, Pakistan and India, and Afghanistan and Pakistan have been embroiled in conflict over sections of their common boundaries, and China also has fought with Russia, the remaining European power in Asia. There have also been other disagreements over boundaries which have been prosecuted by peaceful means; the disputes between the Philippines and Sabah and between Australia and Papua New Guinea are examples of this situation. Fourth, three military cease-fire lines were drawn in Vietnam, Kashmir and Korea; the last two lines still operate as effective international boundaries.

The fifth characteristic is that maritime boundaries are now attracting a great deal of attention amongst the littoral and archipelagic states of Asia. Conflicts over the ownership of the sea-bed have occurred between Thailand and Cambodia, Cambodia and Vietnam, Vietnam and Indonesia, Indonesia and Australia, and Australia and Papua New Guinea. The sovereignty of islands in the South China sea is also disputed by China, Taiwan, the Philippines and Vietnam.

It must be concluded that the boundary evolution of Asia and southeast Asia is incomplete. In some areas between India and China and China and Russia boundaries have never been drawn; in other cases boundaries have been delimited on paper but never marked in the landscape. Elsewhere some boundaries which were demarcated by the imperial powers are regarded as unsatisfactory by one side. It can be expected that the future will bring some conflict, some slight changes in alignment and new treaties to simplify border management.

Mackinder, H. J. (1904). The geographical pivot of history. *Geographical Journal*, 23: 421–44.


A
60°
B
80°
C
100°
D
Volga
Ob'
Yenisey R.
Lena
Oz Baykal
Angara R.
Yablonovyy Khrebet
Shilka
Argun
Kerulen
Chernyy Irtysh
K. Tannu-Ola
Selenge Morän
Altai Mts.
Hangayn Nuru
Aral'skoye More
Caspian Sea
Khr. Saur
K. Dzungarskiy Alatou
Ili R.
Peski Kyzylkum
Peski Karakumy
Amu Darya
Shan
T'ien
A-ko-su Ho
Ala Shan Desert
Pamirs
T'a-li-mu P'en-ti
Paropamisus
Hindu Kush
Hari Rud
Karakoram Ra.
Huang Ho
Darya-ye-Helmand
Sulaiman Ra.
Chenab R.
Sutlej R.
Indus R.
Thar Desert
Ya-lu-ts'ang-pu (Brahmaputra)
Himalayas
Ganga R.
Chang Chiang
Patkai Hills
Yün-ling Shan
Mekong R.
Red R.
Nu Shan
Salween R.
Irrawaddy R.
ANDAMAN SEA
Gulf of Thailand
I N D I A N O C E A N
Str. of Malacca
Sumatera (Sumatra)
Pegunungan Barisan
Desert
Plateau
0 250 500 750 1000 Miles
0 500 1000 1500 Km.


Desert
0 250 500 750 Miles
0 250 500 750 1000 1250 Km.
110°
130°
150°
A
B
C
D
1
2
3
4
50°
30°
10°
Lena
Oz Baykal
Yablonovyy Khrebet
Shilka
Argun'
Amur R.
Sakhalin
Ussuri R.
Kerulen
SEA OF JAPAN
Yalu R.
Ala Shan Desert
Huang Ho
PACIFIC OCEAN
East China Sea
Chang Chiang
Taiwan
Yün-ling Shan
Hsi Chiang
Red R.
Hai-nan Tao
SOUTH CHINA SEA
Mekong R.
Sulu Sea
Gulf of Thailand
Celebes Sea
New Guinea
Pegunungan Maoke
Str. of Malacca
Iran Mts.
Borneo
Sulawesi
Laut Banda
Sumatera (Sumatra)
Pegunungan Barisan
Arafura Sea
Java
Australia


U. S. S. R.
Russia 1718
Russia 1652
Russia 1689
Russia 1727
Semipalatinsk
Kyakhta
Russia 1873
Russia 1859
Caspian Sea
MONGOLIA
Russia 1878
Russia 1871
Tashkent
Russia 1884
Russia 1895
AFGHANISTAN
IRAN
C H I N A
Britain 1895
Britain 1849
Britain 1846
Britain 1879
PAKISTAN
Britain 1883
Bikaner
Britain 1828
Agra
Britain 1803
NEPAL
SIKKIM
BHUTAN
Britain 1843
Britain 1804
Britain 1826
Britain 1758
I N D I A
BANGLA DESH
Calcutta
Diu
Portugal 1513
Britain 1803
Britain 1804
Britain 1886
Britain 1888
N. VIETNAM
Bombay
Britain 1661
Britain 1696
Britain 1852
BURMA
LAOS
THAILAND
Goa
Portugal 1510
Britain 1801
Britain 1826
CAMBODIA
S. VIETNAM
Madras
Pondicherry
Britain 1639
France 1674
SRI LANKA
Portugal 1518
Colombo
Britain 1786
Portugal 1511
Britain 1819
Holland 1658
Britain 1896
MALAYSIA
Melaka
SINGAPORE
INDONESIA
States in addition to China which retained a measure of autonomy
0 250 500 750 1000 Miles
0 500 1000 1500 Km.


States in addition to China which retained a measure of autonomy
0 250 500 750 Miles
0 250 500 750 1000 1250 Km.
U. S. S. R.
Russia 1689
Russia 1858
Russia 1860
Khabarovsk
Russia 1727
Kyakhta
Russia 1900
MONGOLIA
N. KOREA
Japan 1904
S. KOREA
JAPAN
Chiao-hsien
Germany 1898
CHINA
Japan 1895
TAIWAN
HONG KONG
Macau
Chan-chiang
Britain 1842
U.S.A. 1898
Spain 1521
N. VIETNAM
France 1893
France 1898
Portugal 1557
France 1884
LAOS
PHILIPPINES
THAILAND
France 1904
CAMBODIA
S. VIETNAM
Sai Gon
France 1867
Spain 1521
BRUNEI
Britain 1888
Holland 1848
Spain 1545
Germany 1884
P N G
MALAYSIA
Melaka
SINGAPORE
I N D O N E S I A
Holland 1602
Britain 1884
Portugal 1586
Holland 1602
AUSTRALIA
110°
130°
150°
A
B
C
D
1
2
3
4
50°
30°
10°

2 The eastern Sino-Soviet boundary

This section of boundary lying east of Abagaytuy, on the Argun river, was settled by three treaties dated 1689, 1858 and 1860. During the first negotiations China, arguing from a position of strength, secured a satisfactory boundary; the two later treaties contained major Chinese concessions reflecting Russia's supremacy at that time.

The treaty of Nerchinsk in 1689 was welcomed by the Chinese and Russian governments for different reasons. The Chinese were glad to have a settlement which would allow them to deal with a revolt in Outer Mongolia without any meddling by Russia in that territory. The Russians were delighted that the treaty contained clauses which would allow an increased volume of trade between the two countries, for at that time the Russian exchequer was depleted and the economy was ailing.

Both sides sought to secure lines which gave them the larger share of territory, and control of the Amur river was probably the greatest prize. The Chinese delegates were instructed in the strategic importance of the Amur as a gateway for Russian influence amongst Chinese tribes:

> The Amur has strategic importance which must not be overlooked . . . Into the Amur flow the Argun, the Bystra (Bureya) and the Zeya. Along these rivers live our people the Orochon, the Gilyak, the Bihar as well as the Ho-chen and Fei-ya-ko. If we do not recover the entire region, our frontier people will never have peace (Hsu, 52-3).

The Russian negotiators had been told to aim for the Amur which would provide the easiest access to the Pacific ocean, but they quickly realized that such a target was beyond reach and revised instructions stressed the importance of satisfactory commercial relations.

The boundary was defined in general terms in two sections lying east and south of the Gorbitsa river. East of the source of the Gorbitsa river the boundary followed the watershed so that all the tributaries flowing into the Amur fell to China while, with one exception, the area to the north became Russian territory. The exception was the territory lying between the Uda and the watershed to the south. This territory was given a neutral status and its final allocation was not decided. South of the Gorbitsa the boundary followed the Argun river. The treaty must be deemed successful because it produced a boundary from Mongolia to the Pacific ocean which did not provoke any serious incidents for over a century. That fortunate outcome owed more to the low population densities in the borderlands, and the light control which China exerted over its northernmost territories than to the language of the treaty, because the boundary description contained several ambiguities. For example, the terminus of the boundary on the Argun river was not specified and there was no indication of the course followed by the boundary from the junction of the Argun and Shilka rivers to the Gorbitsa. The Latin versions of the treaty also allowed conflicting interpretations of the extent of the neutral zone, but the semi-official Russian and Chinese translations clarified the matter. Potentially the most serious ambiguity concerned the Gorbitsa river. There were two rivers called Gorbitsa; one usually referred to as the Little Gorbitsa while the other also carried the name Amazar. There seems to be no doubt that the Little Gorbitsa was the river intended as the boundary pivot. It flows into the Shilka whereas the Amazar flows into the Amur; the Little Gorbitsa is short whereas the Amazar is long and offers a variety of routes to the watershed; the Little Gorbitsa as a boundary excluded the Russians from the Amur river, whereas the Amazar as the boundary would have resulted from a major Chinese concession; and finally the Shilka valley narrowed abruptly above the confluence with the Little Gorbitsa, which marked a sharp change in the physical landscape. Yet despite these arguments several travellers in the nineteenth century selected the Amazar as the boundary.

The most partisan Russian interpretation of the 1689 treaty would still leave China in control of the territory lying between the Amur, its northern watershed, and one of the courses of the Amazar river. Between May 1858 and November 1860 Russia acquired all this area and the vast tracts of the trans-Ussuri region, giving it a common boundary with Korea.

From the middle of the eighteenth century various Russians, such as Muller in 1741, Myetlet in 1753, Yakoff in 1756 and Shemelin in 1816, had been urging the authorities to acquire the right of transit through the Amur valley, either by negotiation or conquest. Surveys of the route had been encouraged and many expeditions had traversed the route as Ravenstein records. In 1844 Middendorf discovered that the line of Chinese boundary markers lay well south of the Amur's northern watershed, and that there was an area of 139 800 sq. km (54 000 sq. m) awarded to China in 1689 but apparently not controlled by that country. Of course the existence of such markers does not prove that China had abandoned its claim, but it is indicative of the advantage which Russia held throughout the period when these treaties were negotiated.

The Chinese authorities were beset by the Taiping rebellion and external pressure from France and Britain; and the northern garrisons were depleted by reinforcements sent to other more critical areas. The Manchu government restricted the circulation of the indigenous tribes throughout the area to preserve trading privileges for the Manchus, whereas the Russian authorities actively supported the migration of its citizens to the area. By 1858 Russians had established staging posts at several points, such as Blagoveshchensk, along the north bank of the Amur, and on both banks of the lower Amur north of Mariinskoye.

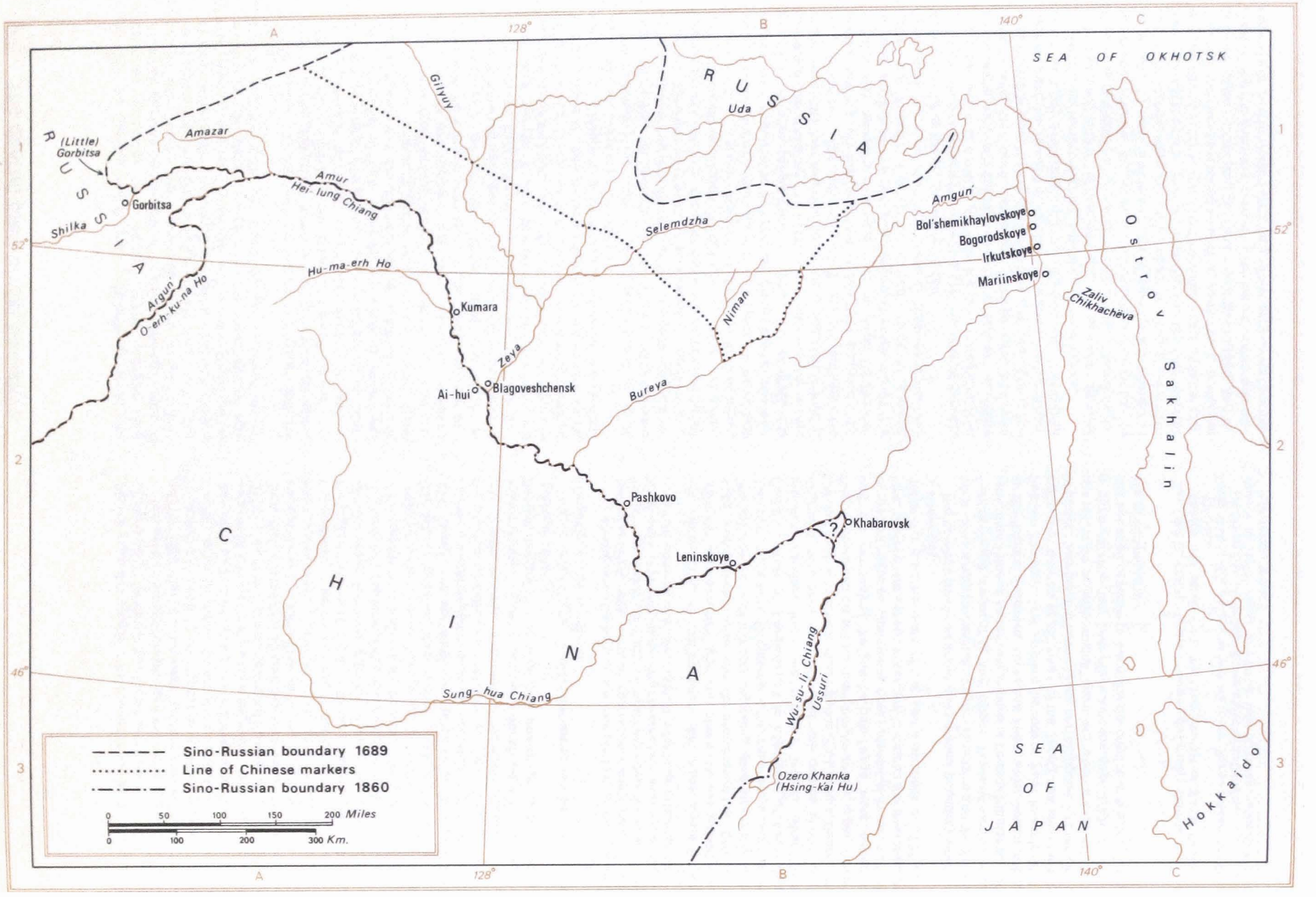
It was in these parlous circumstances for China that Muraviev, governor-general of Eastern Siberia, presented a memorandum to the Chinese in 1855. It was a remarkable document which recommended the cession by China of all territories on the north bank of the Amur. The recommendation was based on four arguments which were uniformly weak. First it was stated that the area had been designated as a neutral zone in the 1689 treaty; this was not a correct interpretation of any of the texts of the 1689 treaty. Second it was noted that Russians had travelled through the area and had built fortresses. This argument discounts entirely the fact that the Russians were trespassing in Chinese territory. Third it was stipulated that the Amur valley was a strategic area for defence against foreign aggression. Britain and France were implicitly regarded as the foreign aggressors, but China could have been excused for believing that Russia was the foreign aggressor. Fourthly and most remarkably the cession of the valleys of the Zaya, Selemdzha and Niman was urged 'although they are within China's domains', because the country near the mouth of the Amur was hard to traverse in winter and summer! The transparent weakness of the arguments is evident, but Russia's military superiority was equally clear and China accepted Russia's terms in 1858.

All territory on the north bank of the Amur was ceded to Russia and a fresh neutral area was created. This new zone was defined in the following terms in the Russian version of the treaty:

> . . . from the river Ussuri down to the sea the territories will as at present be under joint rule of the Ta-Tsing and Russian empires, pending definition of the frontiers in these areas between the two countries.

Russia interpreted this clause to mean the maritime regions bounded by the Ussuri, the Pacific ocean and the Amur; the Chinese thought the clause referred only to the south bank of the Amur between Khabarovsk and the sea. Within two years Russia's interpretation had been translated to fact and the present boundary was established.

Hsu, S. (1926). *China and her political entity.* New York.
Ravenstein, E.G. (1861). *The Russians on the Amur.* London.


A
128°
B
140°
C
1
2
3
52°
46°
SEA OF OKHOTSK
RUSSIA
Uda
Gilyuy
(Little) Gorbitsa
Amazar
Gorbitsa
Shilka
Amur
Hei-lung Chiang
Argun'
O-erh-ku-na Ho
Hu-ma-erh Ho
Selemdzha
Amgun'
Bol'shemikhaylovskoye
Bogorodskoye
Irkutskoye
Mariinskoye
Ostrov Sakhalin
Zaliv Chikhachëva
Kumara
Niman
Zeya
Ai-hui
Blagoveshchensk
Bureya
Pashkovo
Khabarovsk
Leninskoye
CHINA
Wu-su-li Chiang
Ussuri
Sung-hua Chiang
Ozero Khanka
(Hsing-kai Hu)
SEA OF JAPAN
Hokkaido
Sino-Russian boundary 1689
Line of Chinese markers
Sino-Russian boundary 1860
0 50 100 150 200 Miles
0 100 200 300 Km.

3 The central Sino-Soviet boundary

In 1727 the Chinese and Russian governments carried their boundary westwards for a further 2719 km (1690 m). This boundary segment crossed one of the major drainage divides of central Asia, linking the headwaters of the Argun, flowing eastwards to the Amur and the Sea of Okhotsk, and the Yenisey, flowing northwards to the Arctic Ocean. In the eighteenth century this was an inhospitable zone. The uniform permafrost, the dry climate and the short growing season militated against agriculture, and the scattered forests reduced opportunities for grazing.

The same national motives which had prompted the negotiations of 1689 provided the mainspring for the settlement in 1727. China wished to avoid alliances between Russia and nomadic tribes in the frontier which might diminish the area of Chinese sovereignty and encourage disaffection by other nomadic groups in Outer Mongolia and Sinkiang. Russia was mainly interested in the opportunities for profitable trade with China. The commercial relations, which were of benefit only to Russia, were tolerated by China as the price for Russian neutrality in its relations with frontier tribes. Chen noted that, 'If Russia flirted with the nomadic enemies of China, it was only done as a means to play upon Chinese apprehensions, and thereby to derive commercial privileges for the Russian caravans'. China in turn could use threats against commercial arrangements as a lever to encourage Russian co-operation. The failure of the governor-general of Siberia to return some Mongol deserters in 1722, according to the terms of the treaty of Nerchinsk, caused China to suspend trade relations and dismiss the Russian agent, Lang, from Peking. This development alarmed the Russian authorities and led to the 1727 treaties.

The Russians made more thorough preparations for these negotiations than did the Chinese. The Russian delegates were given precise instructions on the four main subjects: commercial relations, deserters, alignment of the boundary, and land for a Russian church in Peking. The main commercial gains that Russia sought were the admission of caravans to China, the establishment of a consular agent in Peking, and unrestricted commerce within China. Surveys of the borderland enabled new maps to be constructed so that Russian claims could be made on the best available geographical knowledge. In contrast, the Chinese emperor did not give detailed instructions to his envoys (Chen, 180). The first round of negotiations occurred in Peking from November 1726 until April 1727 and ten articles were agreed, dealing with the treatment of deserters, passports, the conduct and reception of envoys, and provision for Russian students and priests in Peking. The negotiators then moved to a point near Kyakhta, located on a trade route of growing importance, to fix the boundary. These discussions lasted until August 1727 when the Bur treaty was signed.

The Bur Treaty defined the boundary east and west of Kyakhta in general terms, and made provision for its demarcation. Joint survey teams were then despatched to mark these two boundary sections and they each exchanged detailed descriptions in October 1727, when the full Kyakhta treaty was also signed. The Kyakhta treaty contained the ten articles agreed in Peking as well as the boundary description based on the Bur treaty, rather than the detailed accounts contained in the exchanges of letters.

The 1046 km (650 m) of boundary east of Kyakhta to the river Argun was defined by nine places in the Bur treaty. As far as the Arakhadain Usu the alignment of the boundary was indicated in detail, beyond that point the commissioners were instructed to divide unoccupied areas equally between the two empires and to take advantage, where possible, of convenient physical features such as hills and rivers. These commissioners had an easier task than their colleagues working west of Kyakhta. Not only was the distance much shorter, but the terrain was less rugged, and for most of the distance the previous Chinese boundary was well known and clearly marked. Fifty-two of the sixty-three beacons placed along this section were defined in the exchange of letters by reference to former Chinese boundary beacons.

The terrain between Kyakhta and the Argun is generally below 1525 m (5000 ft), and it is divided by broad river valleys which give a rectangular grain to the topography, since they are mainly aligned northeast and northwest. The boundary, which lies almost due east, cuts across this grain and therefore lacks the uniform watershed basis of the western segment. To avoid future difficulties the commissioners destroyed Russian winter camps south of the line, and the Bratsky people were moved north of the line in the Chikoy valley, while Mongols in the Kyra valley were moved into Chinese territory. With the exception of the last six beacons of this boundary, near the river Argun, this boundary has survived to the present time. In 1911 a Sino-Russian treaty concerned mainly with the Argun river moved the six boundary markers about 8 km (5 m) into Chinese territory along a front of about 97 km (60 m).

Westwards from Kyakhta the boundary stretched for 1673 km (1040 m) to the Shabina Dabaga, and in the Bur treaty its course was defined by twenty-three places, principally mountain peaks and passes. The commissioners responsible for marking this section were instructed to draw the boundary in accordance with the physical features of the landscape. There was no attempt in this section to draw a boundary between existing areas of authority over indigenous people, probably because Chinese and Russian control in this zone was absent or at best tenuous (Mancall, 301).

Indeed one of the Russian delegates boasted about the acquisition of new territories.

> . . . much land was delimited [from Kyakhta to Shabina Dabaga] which had never before been in Russian possession, namely: from the Khan-Tengeri river a distance of approximately eight days horseback ride in length and in width three days, to the Abakana river, and these places had never been under the domination of the Russian Empire (Mancall, 301).

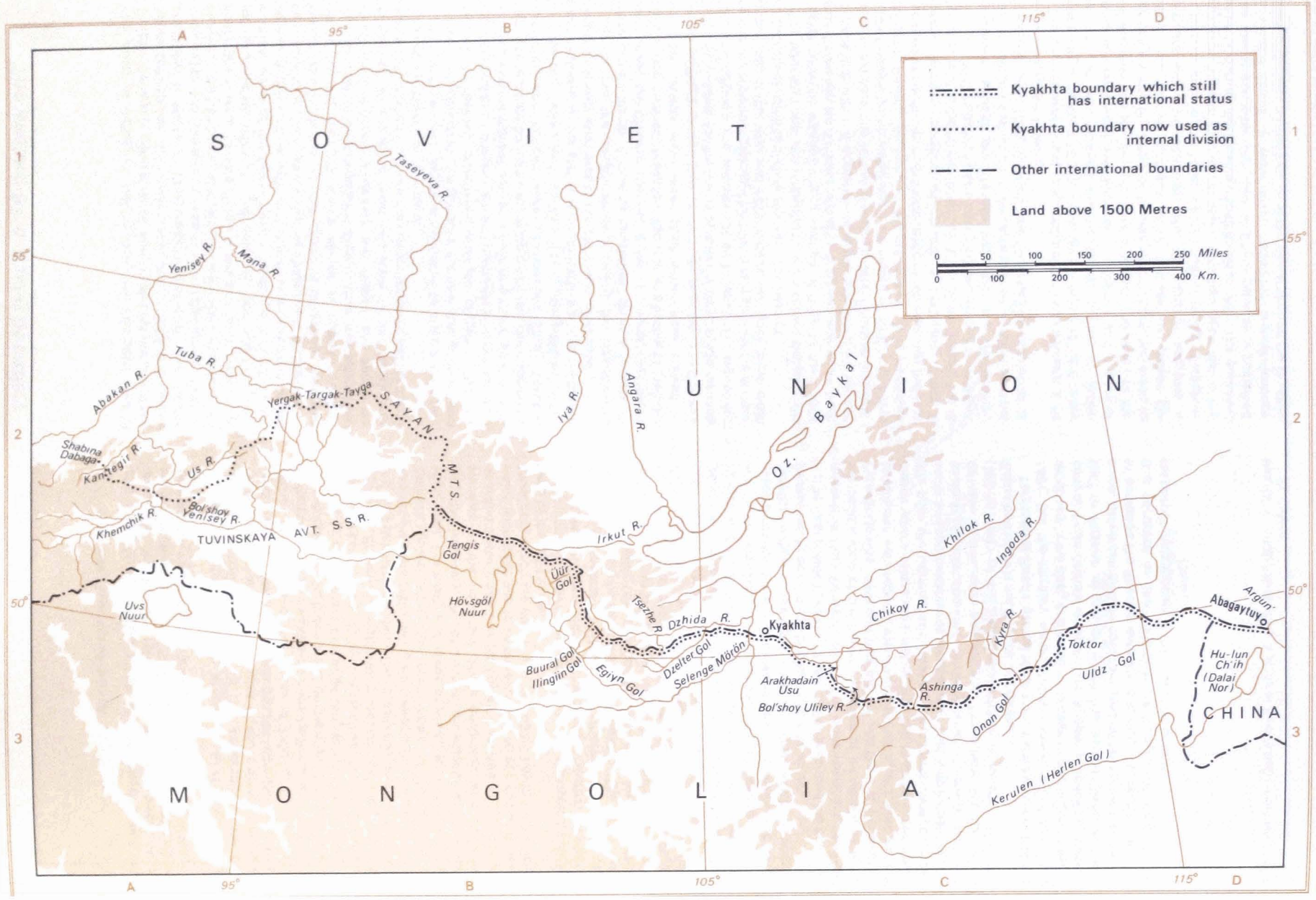
The construction of this boundary into areas where Russian authority had never extended and where Chinese authority was weak, was designed to remove the problems of the 1689 treaty. The regulations in that treaty regarding deserters crossing the boundary were hard to enforce if the deserters could turn the boundary west of Abagaytuy. The alignment of this section probably resulted from two principal factors. First, China exercised suzerainty over the Uriankhy people in the upper Yenisey river, who sent annual tributes of sable furs. Second, the Sayan mountains on the northern border of the upper Yenisey, and the connecting Yergak-Targak-Tayga were shown as prominent features, apparently easily identified in maps of that time. Modern maps reveal the complex structure of this range and make the accurate work of the commissioners in 1727 more praiseworthy.

The commissioners selected a watershed boundary which for much of its length followed the Sayan mountains and the Yergak-Targak-Tayga separating the upper Yenisey valley, which remained Chinese, from those important Yenisey tributaries, such as the Angara, Taseyeva, Mana and Tuba, which flowed through Russian territory. This western boundary from Kyakhta to the eighteenth beacon at the head of the Tengis Gol still forms the boundary between the Soviet Union and Mongolia. The remainder ceased to be an international boundary when the Soviet Union acquired what is now Tuvinskaya Avtonomnaya S.S.R. in 1945. It has not been possible to trace any description of the new Soviet-Mongolian boundary.

Chen, A.F.C. (1949). Chinese frontier diplomacy: Kiakhta boundary treaties and agreements. *Yenching Journal of Social Studies*, 4: 151–205.

Foust, C.M. (1969). *Muscovite and Mandarin: Russia's trade with China and its setting, 1727–1805*. University of North Carolina.

Mancall, M. (1971). *Russia and China: their diplomatic relations to 1728*. Cambridge, Mass.


Kyakhta boundary which still has international status
Kyakhta boundary now used as internal division
Other international boundaries
Land above 1500 Metres
0 50 100 150 200 250 Miles
0 100 200 300 400 Km.
S O V I E T U N I O N
M O N G O L I A
C H I N A
TUVINSKAYA AVT. S.S.R.
Taseyeva R.
Yenisey R.
Mana R.
Tuba R.
Abakan R.
Shabina Dabaga
Kantegir R.
Us R.
Bol'shoy Yenisey R.
Khemchik R.
Yergak-Targak-Tayga
SAYAN MTS.
Iya R.
Angara R.
Oz. Baykal
Irkut R.
Tengis Gol
Uvs Nuur
Höysgöl Nuur
Üür Gol
Tsezhe R.
Dzhida R.
Kyakhta
Buural Gol
Ilingiin Gol
Egiyn Gol
Dzelter Gol
Selenge Mörön
Arakhadain Usu
Bol'shoy Uliley R.
Ashinga R.
Onon Gol
Khilok R.
Ingoda R.
Chikoy R.
Kyra R.
Toktor
Uldz Gol
Argun'
Abagaytuy
Hu-lun Ch'ih (Dalai Nor)
Kerulen (Herlen Gol)
A
B
C
D
95°
105°
115°
55°
50°
1
2
3

4 The western Sino-Soviet boundary

The treaty of Peking in 1860 defined the boundary west of Shabina Dabaga in general terms, and left its final settlement to a future commission. This commission met in 1864 and quickly concluded a treaty at Chuguchak (T'a-ch'eng). Two factors encouraged the Chinese to reach rapid agreement. First, a Muslim revolt had begun at K'u-ch'e in early June and within one month Ma-na-ssu, So-ch'e, Ying-chi-sha and Su-fu were in the hands of rebels, while Umruchi was beseiged and I-ning was isolated. None of the twelve Muslim uprisings in the previous century had spread so quickly. Second, in May Russian forces had launched a pincer attack against Kokand and by September these forces had linked up after capturing Dzhambul, Turkestan and Chimkent. Evidently China wished to conclude a firm boundary before an independent Muslim state was established which might negotiate separately with Russia, and before the Russian advance reached rebel-held areas. In turn Russia was reasonably satisfied to secure a boundary which lay east of the *de facto* line established by its armies.

The commissioners had been instructed to draw a boundary related 'to the direction of mountains, the flow of large rivers and the line of recently established Chinese pickets'. Thus the boundary had to be drawn in a north-northeast direction across a landscape where most of the mountains and rivers lay due east-west. The resulting boundary zig-zagged with east-west segments coinciding with ranges such as Khrebet Saur, Khrebet Dzhungarskiy Alatau and the Tien Shan, connected by north-south segments across plains, coincident with the lines of Chinese pickets. Only very short sections of a few rivers were used.

One of the few disagreements during the negotiations concerned the status of 'recently established Chinese pickets'. In some areas the Chinese had two types of pickets: permanent pickets were manned throughout the year and further to the west temporary pickets were established when tribes subject to China's authority grazed their herds in these areas. The Chinese delegates pressed for the line of temporary pickets, whereas the Russians, naturally and successfully as it transpired, argued for the line of permanent pickets. The 1864 treaty avoided the serious ambiguities of the 1689 and 1858 treaties, and gave much more consistent definition of the line than the 1727 treaties.

The boundary was not immediately demarcated because the Muslim rebellion was gaining in strength and by 11 April 1866 when T'a-ch'eng fell, Chinese authority had been eliminated from all Singkiang with the exception of areas around Pa-li-k'un and Ha-mi in the east. The rebellion began to affect Russian interests. Trade through the Ili valley worth £1 million in 1863 was being disrupted; Russian property in T'a-ch'eng and I-ning had been damaged or confiscated; and thousands of refugees had fled into Russian territory creating administrative problems. When it appeared that Emir Yakub Khan of Su-fu might invade the Ili valley in 1871, Russian forces occupied the area. The Russian government advised the Chinese authorities that the territory would be returned when China was able to exert its authority. That situation arose in 1878, by which time China had reoccupied all its territory except the Ili valley.

The Chinese sent Chunghow, ambassador extraordinary, to St Petersburg in January 1879 to negotiate the return of the Ili valley and he met with Russian representatives hoping to obtain territorial, commercial and financial concessions as the price of administering the territory on China's behalf. The result of the negotiations was the treaty of Livadia which ceded two areas to Russia. The first lay northeast of Oz. Zaysan and placed the boundary along the Ko-la-ssu Ho. The second occupied a rectangular area in the Tekes valley south of I-ning. Chunghow apparently thought that the northern area had been lost to the Russians during the Muslim rebellion (Hsu, 65). The southern area was strategically important to China because it contained the Muzart Davan, a pass which facilitated communications between Chinese territory south of the Tien Shan and the Ili valley and areas to the north. Perhaps it was this provision which accounted for China's refusal to ratify the treaty. A new representative was sent to St Petersburg in July 1880 and fresh negotiations resulted in the treaty of St Petersburg in February 1881.

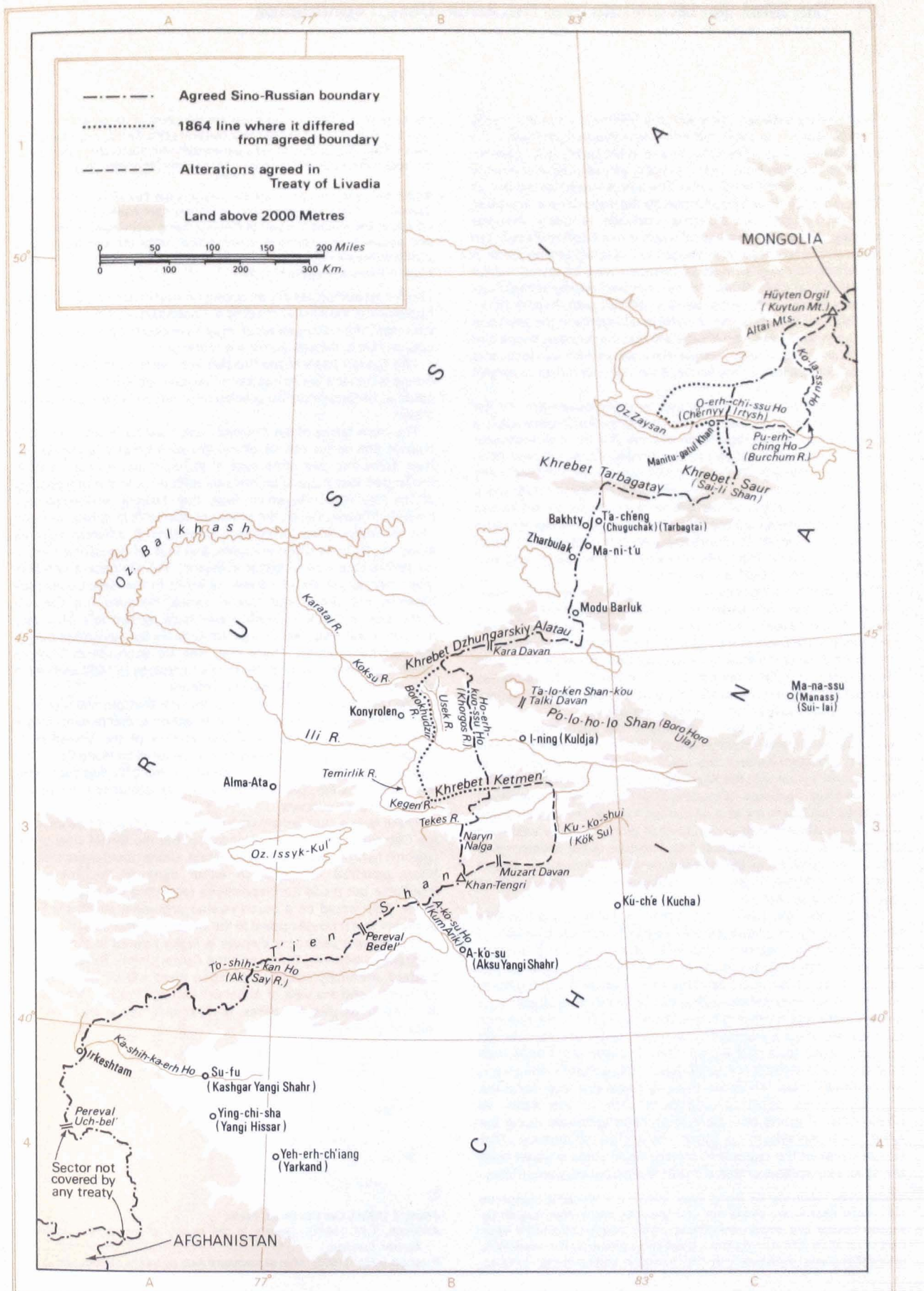
The treaty contained twenty articles, three of which dealt with the new territorial arrangements. The concession in the Tekes valley was exchanged for another of approximately equal size west of I-ning. This area was strategically much less important for China. The transfer of this region of 9320 sq. km (3600 sq. m) shifted the boundary eastwards from the Borokhudzir river to the Ho-erh-kuo-ssu Ho. It was made on the ground that the land was needed by the Russians to resettle Tungan refugees who had fled from Chinese territory during the rebellion. The concession east of the Oz. Zaysan was significantly reduced. On the grounds that the 1864 definition had been found defective and that there was a need to separate tribes owing allegiance to Russia and China, the Chinese salient along the north coast of Oz. Zaysan was eliminated. The treaty also made provision for commissioners to mark the boundary. One of the trade provisions was of interest to students of the boundary. Rules governing land trade were attached to the treaty and they listed thirty-five frontier posts by which such trade was to be conducted. One of these posts was at Irkeshtam, which lies about 168 km (105 m) beyond the terminus fixed by the 1864 treaty.

The entire boundary was defined in five protocols by 22 May 1884, although it took until 1893 before all tribesmen between the Khrebet Dzungarskiy Alatau and Khrebet Saur had been transferred to the correct side of the boundary. The first protocol, dated 18 October 1882 described the boundary from Kara Davan in the Alatau range to the Naryn Nalga. On 25 November 1882 the second protocol extended the boundary west from Naryn Nalga to the Pereval Bedel'. In 1888 the northern sections of the boundary were defined. On 31 July the Chinese concession east of Oz. Zaysan was finalized by a boundary linking the Altai and Saur ranges, and on 21 September the section between Kara Davan and the Khrebet Saur was completed. In each case the protocols made provision for the joint use of boundary rivers, and for the transfer within a specified time of tribes which considered themselves to be on the wrong side of the boundary.

The final protocol, dated 22 May 1884, described the boundary westwards from Pereval Bedel'. The commissioners described the continuation of the boundary south of Irkeshtam as far as Pereval Uch-bel' although they did not visit the area because the terrain was very rugged, there were no roads, and there were no places where pillars were necessary. The protocol noted that at this pass the Chinese and Russian boundaries diverged, going south and southwestwards respectively. That is no longer the case because Russia acquired territory which formerly separated Chinese and Russian possessions. This means that for 307 km (192 m) north of the Sino-Soviet-Afghan tri-junction, the Sino-Soviet boundary is not fixed by any treaty.

Territorially Russia gained most from the treaties of 1864 and 1881, but the territory which China conceded had been held tenuously in the past, and on some occasions had slipped beyond control. From China's viewpoint the treaties produced an eastern limit to Russian expansion which has served China well ever since. China can also be congratulated on being the only country to persuade the Russian authorities to disgorge territory which it had occupied on the continents of Europe and Asia. In that respect China's success in the Ili valley is unique.

Hsu, I.C.Y. (1965) *The Ili crisis: a study of Sino-Russian diplomacy 1871-81*. Oxford.


Agreed Sino-Russian boundary
1864 line where it differed from agreed boundary
Alterations agreed in Treaty of Livadia
Land above 2000 Metres
0 50 100 150 200 Miles
0 100 200 300 Km.
MONGOLIA
Hüyten Orgil (Kuytun Mt.)
Altai Mts.
Ko-tai Shan
O-erh-chi-ssu Ho (Chernyy Irtysh)
Oz. Zaysan
Pu-erh-ching Ho (Burchum R.)
Manitu-getul Khan
Khrebet Tarbagatay
Khrebet Saur (Sai-li Shan)
Bakhty
Ta-ch'eng (Chuguchak) (Tarbagtai)
Zharbulak
Ma-ni-t'u
Oz. Balkhash
Karatal R.
Modu Barluk
Khrebet Dzhungarskiy Alatau
Kara Davan
Koksu R.
Konyrolen
Borokhudzir R.
Usek R.
Ho-erh-kuo-su Ho (Khorgos R.)
Ta-lo-k'en Shan-k'ou
Talki Davan
Po-lo-ho-lo Shan (Boro Horo Ula)
Ma-na-ssu (Manass) (Sui-lai)
Ili R.
I-ning (Kuldja)
Temirlik R.
Alma-Ata
Khrebet Ketmen'
Kegen R.
Tekes R.
Naryn
Nalga
K'u-ko-shui (Kök Su)
Oz. Issyk-Kul'
Muzart Davan
Khan-Tengri
Shan
T'ien
Ku-ch'e (Kucha)
A-k'o-su Ho (Kum Arik)
Pereval Bedel'
A-k'o-su (Aksu Yangi Shahr)
To-shih-kan Ho (Ak Say R.)
Irkeshtam
Ka-shih-ka-erh Ho
Su-fu (Kashgar Yangi Shahr)
Pereval Uch-bel'
Ying-chi-sha (Yangi Hissar)
Yeh-erh-ch'iang (Yarkand)
Sector not covered by any treaty
AFGHANISTAN
A
B
C
77°
83°
1
2
3
4
40°
45°
50°

5 The Sino-Soviet dispute over the Amur-Ussuri confluence

The boundary between China and the Soviet Union in the vicinity of the confluence of the Amur and Ussuri rivers is defined in the treaty dated 2 November 1860. The relevant clause is interpreted in different ways by both countries because each seeks to own the large island near the confluence. The island which has an area of 331 sq. km (128 sq. m) was formed by the deposition of alluvium; *it is low, marshy and contains evidence of many previous* channels. While the island has occupied this position throughout historical time its shape has changed and is still changing today. A comparison of maps at various periods shows a varying outline which is not entirely explained by improved survey techniques. The most recent map, on a scale of 1:250 000 published by Tokyo Geographical Society shows a number of islands in the channels which flank the island, and it is certain that the number, shape and location of these alluvial islands will change with seasonal and irregular fluctuations in the levels of the rivers and their supply of alluvium.

The triangular island is bounded by three waterways. To the north lies the Amur, or the Hei-lung Chiang as the Chinese call it, a large river with an average width of 2 km (1.4 m). The southwest coast of the island is washed by the Protoka Kazakevicheva (K'o-tsa-k'al-wei-ch'ai-wo Shui-tao in Chinese) a narrow waterway 29 km (18 m) long with a maximum width of 900 m (1000 yds.). The southeast margin of the island is bordered by a channel which the Chinese would regard as the Wu-su-li Chiang or Ussuri in Russian, and which the Russian authorities regard as the south branch of the Amur river. This waterway is 36 km (22 m) long with an average width of 1200 m (1300 yds.).

The Russian authorities believe that the proper boundary follows the Amur river as far as the Protoka Kazakevicheva and then that channel as far as the Ussuri river at Kazakevichevo, then south along the Ussuri river. The Chinese government contends that the boundary follows the Hei-lung Chiang eastwards, past the entrance to the K'o-tsa-k'ai-wei-Ch'al-Wo Shui-Tao as far as Khabarovsk where it meets the Wu-su-li Chiang, which it follows upstream past Kazakevichevo and Wu-su-chen.

The Chinese and Russian versions of the 1860 treaty do not favour either of these interpretations. The Chinese version states that the boundary follows 'the lower part of the Hei-Long river *(Amur) until it joins with the Wu-Su-Lee river' and then follows the* Wu-su-li river upstream (Prescott, 57). The Russian translation describes the boundary as a line which follows 'the course of the River Amur downstream to the point of juncture of the said river and the River Ussuri' (Prescott, 54). The crux of the problem is to decide the location of the confluence of the Amur and Ussuri rivers. The Chinese place it at Khabarovsk while the Russians locate it at Kazakevichevo.

The following discussion on the relative claims of each side is based on guesswork because neither side has made available to the authors their detailed arguments. Presumably the Russian authorities argue that the island is in the river Amur, which at this point consists of two channels. The main channel lies to the north and the minor channel consisting of the Protoka Kazakevicheva and the waterway northeast of Kazakevichevo, lies to the south. It then follows that the confluence with the Ussuri occurs between the last-named town and Wu-su-chen. The argument must then proceed that in order to follow the Amur *downstream* to the Ussuri the boundary must follow the Protoka Kazakevicheva, for if the line proceeded down the northern arm of the Amur to Khabarovsk, it would then have to proceed *upstream* along the Amur, past Korsakovo to reach the Ussuri confluence. This Russian view of the region's hydrology finds some support from books and pamphlets written at the time the boundary was drawn.

These [cliffs] continue for many miles without any material change till they reach Khor-Roko, where the river expands into a deep bay on its southern shore, and this is named Noung-gla . . . Beyond the bay a large tract of meadow land runs up into a great curve turned by the mountains, where they sweep round towards the Oussoure, ending in high cliffs on the bank of the Amoor, and these are the rocks of Kirma which form a bold and picturesque headland. A small arm of the Amoor makes a turn to the south at this point, and runs on towards the mouth of the Oussoure, having a narrow tract of flat land along the bank (Atkinson, 465).

A little below the mouth of the Oussoure is the Toungouz settlement of Tourne . . . There are many villages on the right bank of the southern branch of the Amoor, *the bed of the river being many miles* to the north, and enclosing an enormous island, round which the branch makes a considerable curve to the northward, and meets the great stream at the rocks of Beree (Atkinson, 471–2).

The Soviet authorities are on strong ground in arguing that it is the hydrology of the area *at the time the boundary was drawn* which is important. Any changes which may have occurred since 1860 are not relevant to the solution of the problem.

The second basis of the Russian argument must be the period during which the island has been occupied by Russian and Soviet citizens. Unfortunately no precise information is available on this matter.

The main thrust of the Chinese case must be that the island in dispute lies in the course of the Wu-su-li Chiang, and that this river splits into two arms east of Wu-su-chen. It must then be contended that there is an obvious difference in the morphology of the two channels which fixes that flowing northeastwards towards Khabarovsk as the principal course. It is in fact reported that the water flows in different directions in different seasons along the Protoka Kazakevicheva, and that on occasions there is no perceptible flow in either direction. The Chinese authorities must then argue that the treaty referred to the main confluence between the Amur and Ussuri rivers, because the Chinese authorities at that time would never have agreed to a boundary through a waterway which was not suitable for navigation during the summer months. There may well be accounts in Chinese which support this view of the area's hydrology in 1860 and which offset the opinions of Atkinson and others.

The Chinese can probably counter any Russian claim of long occupation by referring to the first objection to that tenancy by the Chinese authorities. The Chinese version of the boundary is certainly recorded on a Chinese map prepared by Hung Chun and published in April 1890 at a scale of 1:2 268 288, and there may have been earlier Chinese protests and assertions about the location of the boundary.

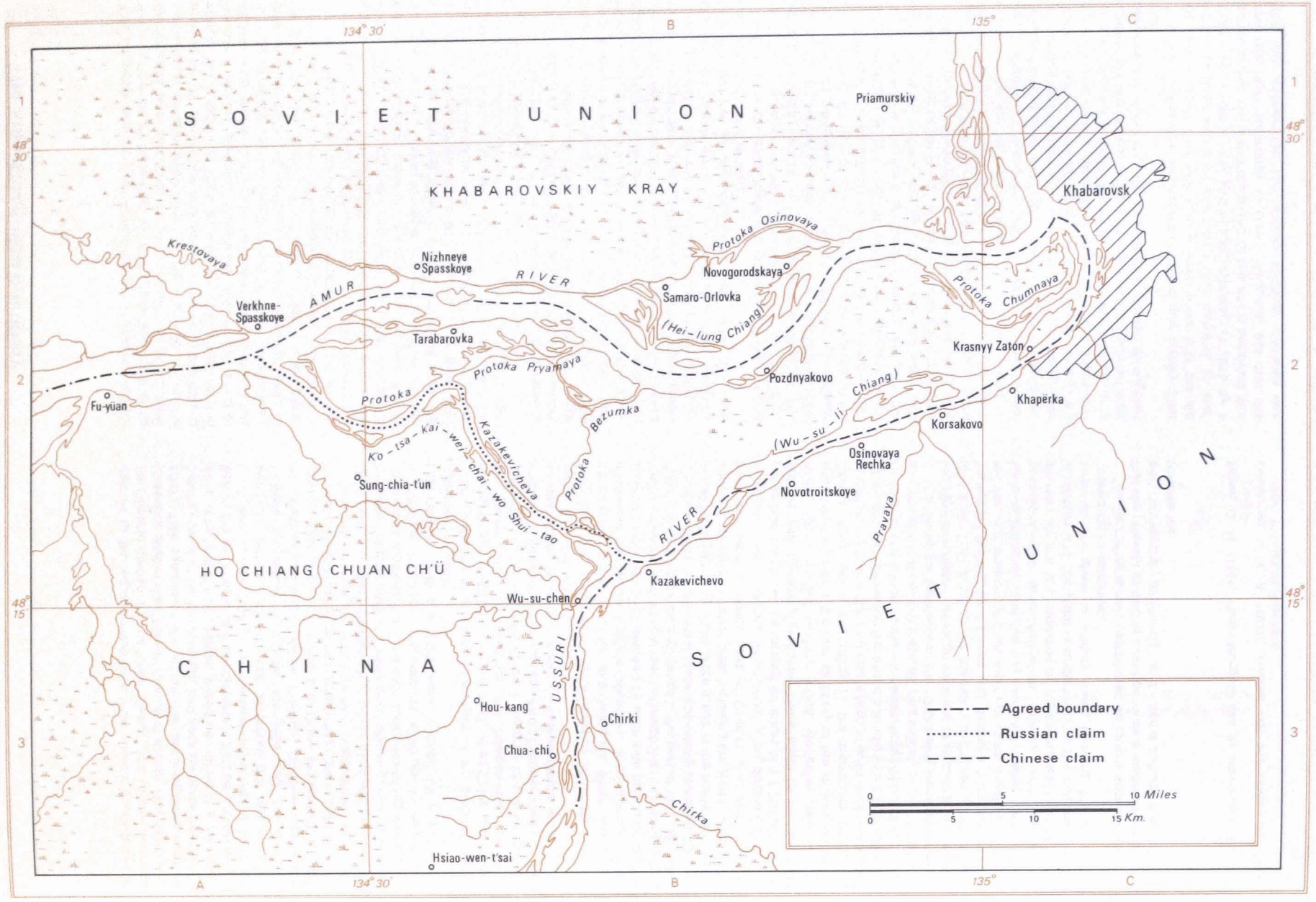
There is one supplementary argument which could be used by the Chinese if it was ever established that the Soviet view of the region's hydrology in 1860 was correct. China could claim that the treaty awarded the land on either bank to the competing kingdoms but made no dispositions regarding the islands in the Amur. This would be a much weaker argument and there is no evidence that it would appeal to the Chinese authorities.

The present boundary dispute is firmly related to the political differences between China and the Soviet Union. So long as the present unfriendly relations continue there will be no boundary settlement and the view of Ancel will find justification. 'Il n'y a pas de problèmes des frontières. Il n'est que des problèmes des Nations' (Ancel, 196).

Ancel, J. (1938). *Les frontières*, Paris.

Atkinson, T.W. (1861). *Travels in the region of the upper and lower Amoor*, London.

Prescott, J.R.V. (1975). *Map of mainland Asia by treaty*, Melbourne.


A
134° 30'
B
135°
C
1
2
3
48° 30'
48° 15'
S O V I E T U N I O N
KHABAROVSKIY KRAY
Priamurskiy
Khabarovsk
Protoka Osinovaya
Krestovaya
Nizhneye Spasskoye
RIVER AMUR
Novogorodskaya
Samaro-Orlovka
(Hei-lung Chiang)
Protoka Chumnaya
Verkhne-Spasskoye
Tarabarovka
Krasnyy Zaton
Protoka Pryamaya
Pozdnyakovo
Protoka
Fu-yüan
Khaperka
(Wu-su-li Chiang)
Korsakovo
Ko-tsa-kai-wei-chai-wo Shui-tao
Kazakevicheva
Protoka Bezumka
Osinovaya Rechka
Sung-chia-t'un
Novotroitskoye
RIVER
Pravaya
HO CHIANG CHUAN CH'Ü
Kazakevichevo
Wu-su-chen
C H I N A
S O V I E T U N I O N
USSURI
Hou-kang
Chirki
Chua-chi
Chirka
Hsiao-wen-t'sai
Agreed boundary
Russian claim
Chinese claim
0 5 10 Miles
0 5 10 15 Km.

6 The Sino-Mongolian boundary

This boundary stretching for 4698 km (2920 m) was defined for the first time on 26 December 1962 and the description of its demarcation was published on 30 June 1964. It is the most meticulously described boundary in the whole of Asia. It is marked by 678 cement and rock markers located at 639 turning points; the location of each marker and the course of the boundary between adjoining markers are described in a text of 68 000 words, and are indicated in an atlas of 105 maps at a scale of 1:100 000 and 6 maps at a scale of 1:10 000. The need for such detailed demarcation is appreciated when the physical nature of the Sino-Mongolian border is understood. This is a dry zone, remote from the benefits of southerly or easterly monsoons in summer. Apart from Dornod in the extreme east, the annual rainfall is generally below 254 mm (10 in.), and even in Dornod the annual total rarely exceeds twice that amount. Thus only in the east are there perennial rivers and lakes which can be used to identify the boundary. Much of the topography consists of level plateaus and plains varying in height from 450 to 1525 m (1500 to 5000 ft.) above sea-level. Only in the extreme west does the Mongolian Altai range rise over 2100 m (7000 ft.). This means that apart from the extreme east and west where fluvial and topographic features respectively could be used to locate the boundary, the surveyors had to trace a line through what is often an unrelieved desert where there are few cultural features.

When the evolution of the Sino-Mongolian boundary is considered, obvious parallels emerge between the circumstances of Tibet and Mongolia. They were both areas where Chinese influence, though of long duration, was less than complete. They are arid areas where herding was the dominant activity, and they were located between China and two competing imperial powers: Britain and Russia. Both areas had a long tradition of spiritual rulers and in November 1911 the increasing tempo of the Chinese revolution allowed both to break their ties with China and exercise a greater measure of autonomy, including the conduct of foreign relations. But at this point the parallels disappear. Mongolia eventually became an independent country, while Tibet was reabsorbed into China in 1950.

Chinese emperors established suzerainty over first Inner and then Outer Mongolia in the seventeenth century, but their authority lay lightly over Outer Mongolia for two centuries. The Chinese Court seemed satisfied to leave the inhabitants of that area largely to themselves, and the main Chinese involvement concerned the division of Outer Mongolia into regions within which Chinese officials fulfilled limited functions and occasionally quelled rebellions (Friters, 156). Indeed special regulations were enacted to reduce the scale of Chinese intercourse with the region. Colonization of the area by Chinese was forbidden, and Chinese entering Outer Mongolia were not allowed to take their families or to marry Mongolians. Chinese travellers could only enter Outer Mongolia by specified routes and traders were forbidden to grant credit to Mongolians. These policies were reversed at the end of the nineteenth century, after defeat by Japan in Korea, and pressure by other powers, including Russia, made the Chinese court fearful for the security of its borderlands. The laws against colonization, intermarriage and the immigration of Chinese families were abrogated, and there was more direct Chinese involvement in matters of trade, communications and border surveillance in Outer Mongolia. This policy change came too late to prevent the loss of Outer Mongolia which declared itself independent in November 1911 as disorder spread throughout China.

The next decade was very eventful in Mongolian history. First there was an agreement with Russia which noted that 'the old relations between Mongolia and China thus came to an end' (MacMurray, II, 992). This was quickly followed in 1915 by a tripartite agreement with Russia and China which recorded that China exercised suzerainty in Outer Mongolia, but that this region was autonomous. The territory of Outer Mongolia was defined as 'the regions which have been under the jurisdiction of the Chinese Amban of Urga [Ulaan Baatar], the Tartar-General of Uliassutai, and of the Chinese Amban of Kobdo' (MacMurray, II, 1067). This agreement also noted that because there were no detailed maps of the borderlands, and because some boundaries were uncertain, the boundaries would be settled at a later date. Before this work could be started events in Europe, and especially in Russia, allowed China to reassert its authority in Outer Mongolia. Friters (183–93) has described this last phase of Chinese ascendancy in Outer Mongolia and the confused circumstances involving White Russian, Chinese and Soviet forces, which eventually resulted in Outer Mongolia becoming independent as the Mongolian People's Republic in 1924.

Curiously Mongolia's first boundary negotiations were with Japan which in 1931–2 established Manchukuo and then in 1938 captured the provinces of Chahar and Suiyuan in Inner Mongolia. These advances created a common Japanese-Mongolian border of 1700 km (1060 m). Unsuccessful attempts to negotiate a boundary in 1935 and 1939 were followed by a successful agreement in 1942.

The first step to the final agreement of the Sino-Mongolian boundary was taken on 14 August 1945, when China agreed with the Soviet Union to recognize the independence of Outer Mongolia, if that was desired by a majority of the Mongolians voting in a plebiscite. The plebiscite on 20 October 1945 provided an overwhelming vote in favour of independence which China recognized on 5 January 1946.

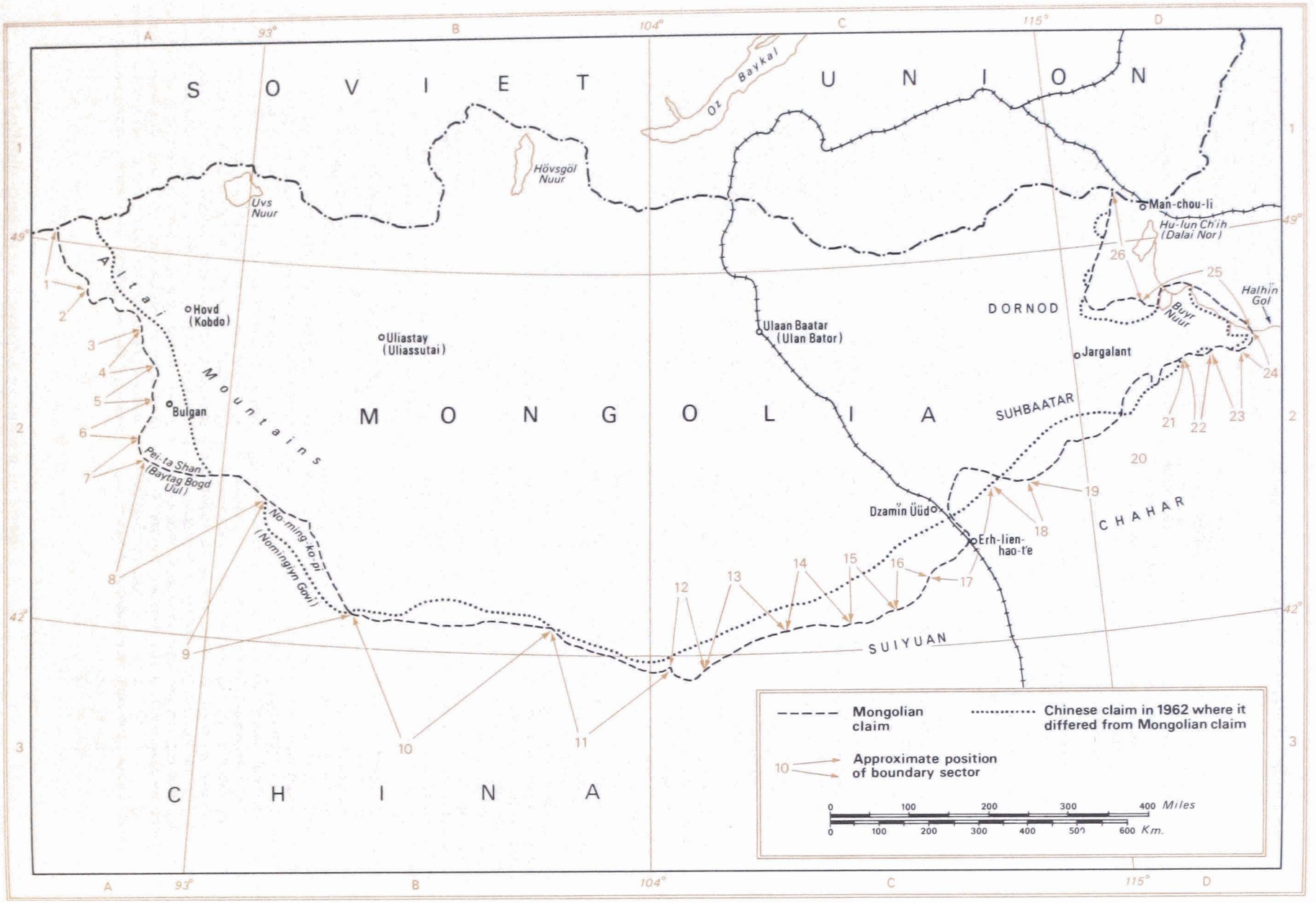
No details have ever been made available about the course of negotiations between China and Mongolia which led to the successful demarcation of the boundary. A comparison of the location of the boundary claimed by each side before December 1962 reveals some discrepancies, although it is interesting to note that these discrepancies diminished in the period 1951–60 as the Chinese claims on published maps apparently retreated. Indeed, in 1962 it appears that there were areas in the borderland which were not claimed by either side, including the Nomin Gobi in the west and smaller zones east of Dzamin Uud and south of Jargalant. The boundary description is so detailed that only occasional points can be located on maps of 1:1 000 000, which are the best generally available. There seem to be two areas where China gained territory which Mongolia claimed. The boundary lies within 3.83 km (2.38 m) of the railway station of Dzamin Uud, which according to the traditional Mongolian boundary lay 20 km (12.5 m) inside Mongolia. In the extreme east China secured the Halhin Gol as the boundary for 61 km (38 m) of its course, and access to the northwest shore of Buyr Nuur, which was shown on Mongolian maps as lying entirely within Mongolia.

The twenty-six segments of the 1962 treaty were preserved in the 1964 description, although the limits of all cannot be precisely identified. Each point on the boundary is defined in terms of its immediate locality, its distance and direction from the previous marker, and its bearings from nearby prominent features. Cultural features are rarely used, the only exceptions being roads on three occasions, the Sino-Mongolian railway, and two animal enclosures; this is a reflection of the inhospitable nature of the landscape and the point is underlined by the number of times bearings are given to solitary trees, showing that these are noteworthy occurrences.

The boundary is now established so clearly and permanently that the relevant protocols could serve as a model for statesmen and surveyors delimiting and demarcating international boundaries.

Friters, G. M. (1951), *Outer Mongolia and its International Position*, London.

MacMurray, J. V. A. (1921), *Treaties with and concerning China, 1894–1914*, 2 vols, New York.


SOVIET UNION
MONGOLIA
CHINA
Oz Baykal
Hövsgöl Nuur
Uvs Nuur
Altai Mountains
Hovd (Kobdo)
Uliastay (Uliassutai)
Bulgan
Pei-ta Shan (Baytag Bogd Uul)
No-ming-ko-pi (Nomingiyn Govi)
Ulaan Baatar (Ulan Bator)
Dzamïn Üüd
Erh-lien-hao-t'e
DORNOD
SUHBAATAR
CHAHAR
SUIYUAN
Man-chou-li
Hu-lun Ch'ih (Dalai Nor)
Buyr Nuur
Halhïn Gol
Jargalant
Mongolian claim
Chinese claim in 1962 where it differed from Mongolian claim
Approximate position of boundary sector
0 100 200 300 400 Miles
0 100 200 300 400 500 600 Km.

7 The Afghan-Soviet boundaries of 1872 and 1895.

The Afghan-Russian boundary was defined by Anglo-Russian agreements between 1872 and 1895, and confirmed by Soviet-Afghan treaties after 1945. The first agreement was contained in an exchange of letters in October 1872 and January 1873; it defined the boundary from Oz Zorkul in the east to the frontier between Persia (Iran) and Afghanistan in the west. A series of protocols dated 1884–8 settled the boundary between the Zulfikar pass in the west to Kwaja Salar on the Amu Darya. The short concluding boundary between Oz Zorkul and the Chinese border was settled in 1895. This section considers the lines established in 1872 and 1895; the more complex negotiations associated with the protocols of 1884–8 are described on the following pages.

The origins of the 1872–3 agreement can be traced to correspondence in 1869 when both the Russian and British governments showed a desire for a neutral area between their respective territories in Asia. The delay in reaching agreement was caused by the different requirements of each side. Britain wanted the neutral zone to be as wide as possible so that Russia would remain distant from Afghanistan; it was certainly considered that the khanate of Khiva (41°25' N., 60°49' E.) should form part of the neutral zone. Russia's prime interest was in securing a safe avenue from the Caspian to central Asia which would allow the newly acquired territories to be made commercially profitable. The best routes to serve this purpose lay south of the Aral sea through the territories of Khiva and Mary, to the Amu Darya. This Russian ambition was clearly recognized by the British representatives in St Petersburg and Teheran, but their warnings were disregarded (Prescott, 99–100). Indeed, the detailed story of these negotiations is largely a history of Russian success as they finessed and trumped the British high cards to take most of the tricks.

The establishment of a neutral zone properly requires the definition of two boundaries, one with Russia and the other with British territories. This simple point escaped the British authorities who finally settled for a definition of the northern boundary of Afghanistan. This meant that there was a clear line limiting the expansion of British influence into the supposed neutral zone, but no corresponding line to halt Russia's advance.

At the very beginning of the detailed discussion about Afghanistan's northern boundary Britain proposed the upper Amu Darya, south of Bukhara as 'the boundary line which neither Power should allow their forces to cross'. The Russians raised two problems about the river as a boundary. First, there was the question of fixing its western terminus; second, there was the problem that Bukhara owned territory south of the line.

The Indian administration informed the British negotiators that Kwaja Salar was the proper western terminus, and this was duly proposed to the Russians. There was some confusion about the actual location of Kwaja Salar. The Indian officials referred to the ford; the British authorities referred to the port in the final agreement; the commissioners charged with marking the boundary discovered that the name also applied to a ferry, a tomb, a house, the narrow portion of the river, and a district east of Kerki. In a Russian report, prepared by General Kaufmann, Kwaja Salar was identified as being located near Tash Gozar, which is 77 km (48 m) east of the location favoured by Britain. Yet after a long debate between the two countries Kwaja Salar was agreed to be the point at which the boundary left the river without any precise agreement on its location! By contrast the eastern terminus at Oz Zorkul, created no debate and no problems. It was apparently considered that the Pamirs were so inhospitable that there was no risk of collision between Russian and British forces, and a gap was left between the lake and the Chinese border. The British ambassador in St Petersburg noted that Russia had exhibited such friendly feelings in that quarter that any fears of conflict were only a phantom of timid minds. To which the Russian foreign minister replied 'A phantom indeed; even if man were wicked enough to entertain such designs, nature is there to stop him'. (Prescott, 105).

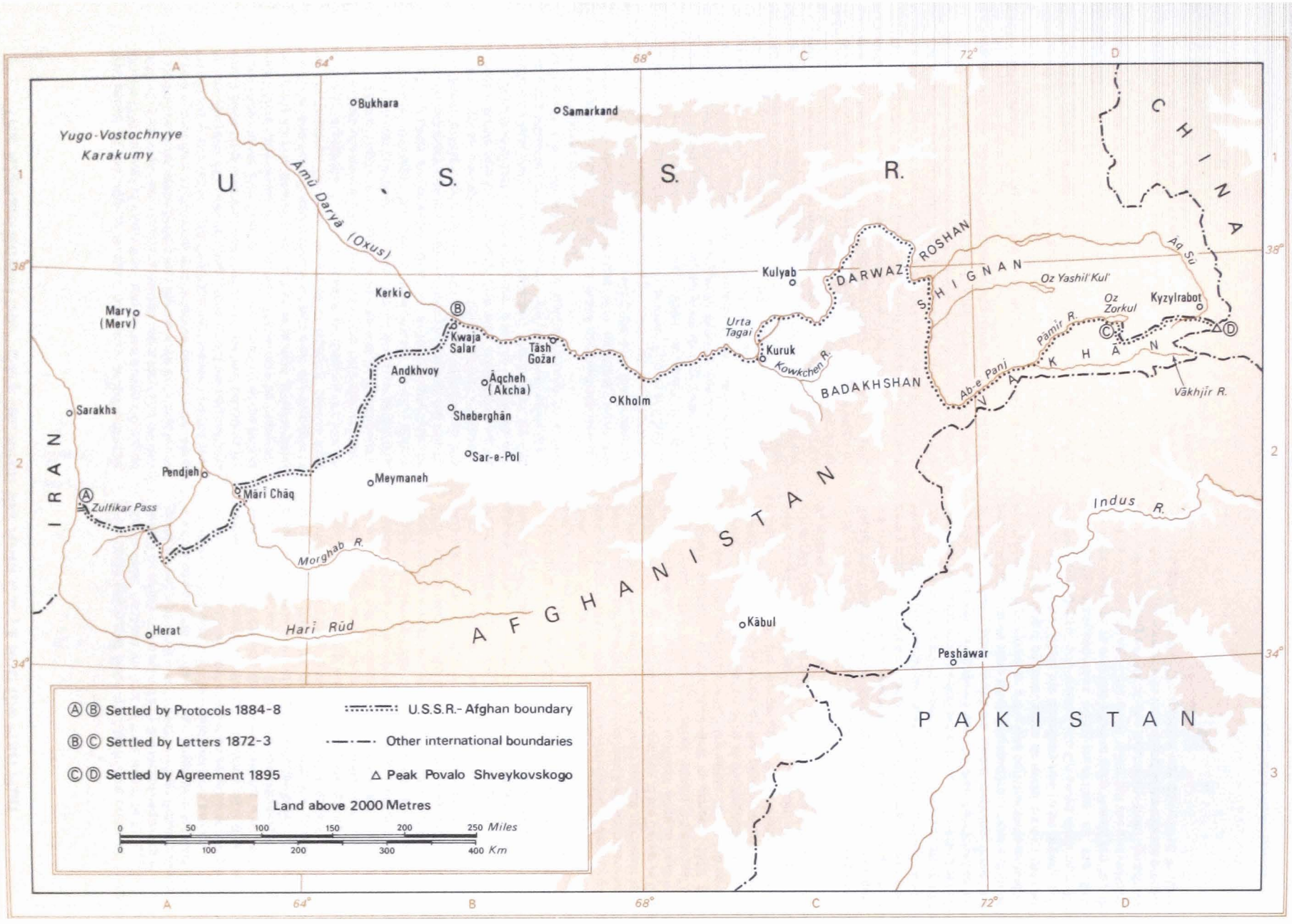
By claiming the Amu Darya as the northern boundary of Afghanistan, Britain was laying claim on that country's behalf to the territories of Badakhshan and Vakhan. This claim was disputed by Russia, which believed the territories to be independent. Russia justified its opinion about the country's independence on the grounds that Bukhara and Kokand held this view, and because there were no apparent trappings of Afghan authority; there were no Afghan officials and no tax collections on behalf of the Afghan treasury. Britain retorted that Afghanistan acquired Badakhshan in 1859; that Bukhara had refused to help Badakhshan throw off the Afghan yoke in 1863 on the ground that it was properly subject to the Afghan government; and that Badakhshan had a different administrative structure to Afghanistan because the emir had established an experimental form of government!

Indeed, at first the only agreement was that both states were weak and that Vakhan was usually subject to Badakhshan, which made it sensible to treat them together. Russia, noting the state of peace between Badakhshan and its northern neighbours, argued that this desirable condition would be maintained by leaving the territories outside Afghanistan, whereas if Afghanistan and Bukhara had a common boundary the risk of conflict would be increased. Britain took the contrary view that if these weak states were left independent they would invite aggression from both major neighbours. This protracted debate ended abruptly when Russia accepted Britain's position, and with it the Amu Darya as the boundary from Oz Zorkul to Kwaja Salar. Russia's decision was claimed to be in recognition that Britain had a better facility for collecting information about the area, and because it was not desired to give the matter unwarranted importance. It seems more likely that Russia had recognized that an apparent concession at this point might bring more valuable compensation later; fourteen years later Russia referred to this concession in extracting advantages west of Kwaja Salar.

The 1872-3 agreement made no reference to the ownership of islands in the Amu Darya. Fortunately this was not a matter which caused any dispute and the issue was placed beyond doubt by the Afghan-Soviet treaties after 1945.

As exploration of the Pamirs proceeded it became apparent that the Amu Darya did not coincide with the political boundary between Afghanistan and Bukhara. Darwaz, a Bukharan province, extended south of the river, while Roshan and Shignan were Afghan areas lying to its north. Russia insisted on the terms of the 1872–3 agreement and demanded the withdrawal of Afghan troops from those areas of Roshan and Shignan lying north of the river. Sir Mortimer Durand was sent to Kabul in 1893 to persuade the emir to withdraw his troops. The emir eventually agreed to exchange the areas of Roshan and Shignan north of the river for the area of Darwaz to the south. The Russian explorations also made it clear to Britain that it was necessary to draw a boundary between Oz Zorkul and the Chinese border to limit Russian expansion. Britain tried unsuccessfully to interest the Chinese in this boundary construction and in March 1895 agreed with Russia to extend the boundary eastwards to peak Povalo Schveykovskogo. The boundary definition was remarkably imprecise, reflecting the lack of geographical knowledge of this area. However, neither side took advantage of this situation and the boundary was demarcated by twelve pillars in 1895. To insulate the Russian and British empires from contact the British authorities, with Russian agreement, persuaded the emir of Afghanistan to accept sovereignty over Vakhan, thus creating the curious extension of Afghan territory which gives it a common boundary with China.

Prescott, J.R.V. (1975). *Map of mainland Asia by treaty.* Melbourne.


A
64°
B
68°
C
72°
D
1
2
3
38°
34°
U. S. S. R.
CHINA
IRAN
AFGHANISTAN
PAKISTAN
Yugo-Vostochnyye Karakumy
Āmū Daryā (Oxus)
Bukhara
Samarkand
Kerki
Mary (Merv)
Kwaja Salar
Tāsh Gozar
Andkhvoy
Āqcheh (Akcha)
Sheberghān
Kholm
Sar-e-Pol
Meymaneh
Sarakhs
Pendjeh
Zulfikar Pass
Mārī Chāq
Morghab R.
Herat
Harī Rūd
Kulyab
Urta Tagai
Kuruk
Kowkchen R.
DARWAZ
ROSHAN
SHIGNAN
BADAKHSHAN
Aq Su
Oz Yashil' Kul'
Oz Zorkul
Kyzylrabot
Pamir R.
Ab-e Panj
WAKHAN
Vākhjīr R.
Kābul
Peshāwar
Indus R.
Ⓐ Ⓑ Settled by Protocols 1884-8
Ⓑ Ⓒ Settled by Letters 1872-3
Ⓒ Ⓓ Settled by Agreement 1895
U.S.S.R.- Afghan boundary
Other international boundaries
△ Peak Povalo Shveykovskogo
Land above 2000 Metres
0 50 100 150 200 250 Miles
0 100 200 300 400 Km

8 The Afghan-Soviet boundary between the Amu Darya and the Hari Rud

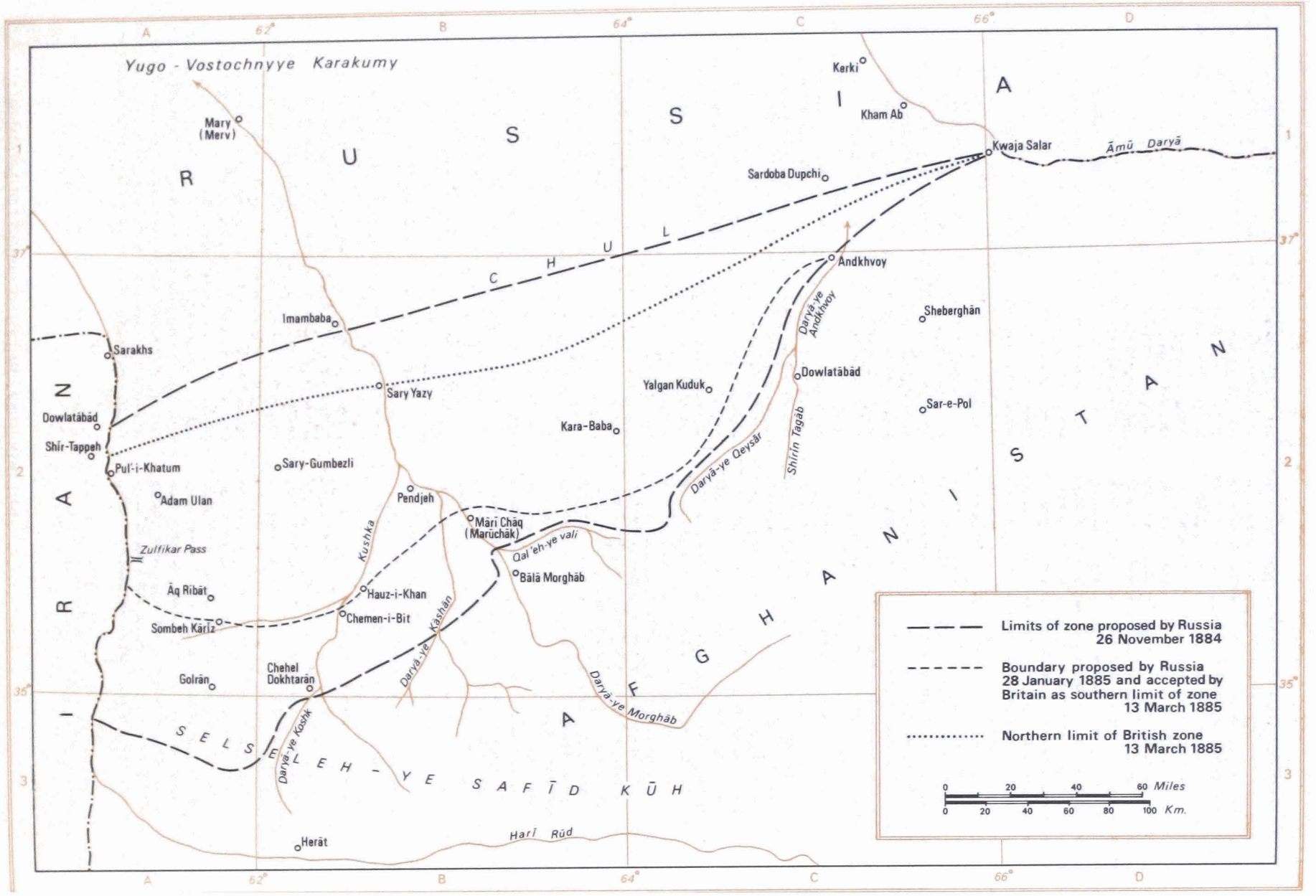
The sector of the Afghan-Russian boundary which stretches 563 km (350 m) west of Kwaja Salar was settled during the period 1882–8. Two main features characterized these long and difficult negotiations. First, while Britain and Russia were both anxious to create a boundary to promote and preserve peace in the area, there were strong differences about the best location for the line. As mentioned on the previous page, throughout the negotiations Russia seemed to hold the upper hand, and the final boundary lay much closer to the ideal Russian line than to the limit which Britain would have considered to be perfect. There may be many explanations for this development, but an important consideration seems to have been Russia's consistent and clear aim throughout the negotiations. To make the areas of Russian central Asia profitable, a practical route was needed by drawing the line as far south as possible so that it secured some habitable territory south of the Yugo-vostochnyye desert, as well as the important centres on the Darya-ye Morghab and Amu Darya which flow northwards through this desert. Presumably it was always Britain's counter aim to keep Russia as far from Afghanistan as possible, but there was no consistent policy to achieve this aim. At first Britain pressed for a neutral zone between Afghanistan and Russia; then an attempt was made to persuade Iran (Persia) to accept a buffer role in the desert. Only after these two policies were discarded did the British authorities begin to work towards a satisfactory boundary between Russia and Afghanistan. By that time many valuable opportunities had been lost, both to secure a line well to the north of the final boundary, and to collect information about the borderland.

The second important feature of these negotiations was the importance of geographical factors. For example, when the British authorities finally came to real grips with the problems, they identified three features which could not be yielded to Russia; they were the Zulfikar pass on the Hari Rud, Mari Chaq on the Darya-ye Morghab, and Kwaja Salar. Although the final boundary trended south of the direct lines joining these points there was plainly a limit to the depth of Russian salients which would be allowed. The different alignment of rivers east and west of Mari Chaq, the complex patterns of canals and fields in the Kushka and Kashan valleys, and the recent changes in population distribution following Turkoman raids into the Afghan border lands, all complicated the negotiations. Finally the geographical ignorance of both sides at different times played an important role in allowing the other side to gain an advantage, and resulted in questions considered settled being re-opened. The first stage of the negotiations lasted from February 1882 until April 1884. Britain tried to become involved in the discussions between Russia and Persia (Iran) but was rebuffed by Russia. However that country offered to negotiate a boundary from Kwaja Salar to Sarakhs on the Hari Rud. That proposal was declined by the British authorities because 'the proposal did not in any way meet the requirements of the case'. That was the best offer Russia ever made and the ultimate terminus on the Hari Rud lay 100 km (60 m) south of Sarakhs!

On 14 February 1884 the British authorities received a rude shock. The Mary tribes made submission to Russia and were accepted. Although the British authorities were able to catalogue Russian assurances that this event would not occur, there was now no choice but to accept the Russian offer to negotiate a boundary west of Kwaja Salar. Britain immediately proposed a joint commission of Russian, British and Afghan members but Russia vetoed the membership of Afghanistan. There was then an involved discussion about where the Anglo-Russian commission should begin its efforts to select the main points on the proposed boundary. Britain wanted the work to begin at Sarakhs because they could reach that place quickly; Russia preferred to start at Kwaja Salar because the loss of time would be insignificant and 'would be amply compensated by the fact of beginning at a known point agreed by both Governments'. Further Russia believed that it would be possible to make faster progress in the eastern sector of the boundary and that this would avoid the problem of giving a bad impression to the local population because of disagreements. While this discussion continued it became clear that there was a sharp division of opinion about the principles which should guide the commissioners. For Britain the commission's task was to ascertain the 'true limits of the Ameer's territory', this meant that the members must be concerned with the political relations existing between tribes in the borderland. A subsidiary task was to draw a boundary which would not impose on the emir territorial obligations he would be unwilling to assume or unable to fulfil. Russia was not interested in limiting the commission to discovering the current political *status quo;* instead, looking to the future it was asserted that lasting peace would only be secured by drawing a line coincident with the geographic and ethnic divisions of the borderland, so that all Turkoman tribes and the land they occupied were excluded from Afghanistan. In the end the British sent their commissioner to the borderland where he gathered much valuable information, but the Russian commissioner did not appear; the Russians had decided that closer definition of the line was required before any commission could be effective.

To secure closer definition Russia suggested that the boundary should be sought in a triangular zone. The northern edge was fixed from Kwaja Salar to Dowlatabad on the Hari Rud; the western side was the course of the Hari Rud and the triangle was completed by a line which firstly followed the Parompamisus hills of the Selseleh-ye Safid Kuh and then turned northeast to pass south of Mari Chaq and follow the courses of the Darya-ye Qeysar and Darya-ye Andkhvoy past the northern edge of Andkhvoy to Kwaja Salar. The British authorities raised objections to the southern boundary of this zone and in January 1885 Russia proposed a firm boundary which lay within 16 km (10 m) of the ultimate line. This proposal so early in the negotiations revealed Russia's greater appreciation of the geographical, ethnic and political realities of the borderland. While these suggestions passed between St Petersburg and London, Russian forces advanced from Sarakhs to Pul-i-Khatum to the Zulfikar pass and from Sary Yazy to Pendjeh.

By now the compromise line was defined fairly closely and in September 1885 a protocol defining the boundary was signed. It did not define the whole boundary with equal clarity as the joint demarcation commission discovered. From the Zulfikar pass to Hauz-i-Khan the boundary was precisely defined and the commission simply had to mark the line. Between Hauz-i-Khan and Mari Chaq the line was defined in principle; the land occupied by the Saryks and the pastures used by their herds had to be left to Russia. There were problems about defining these areas, because Saryk lands were often irrigated from canals originating in Afghan territory. However a line was constructed eventually and conditions were laid on both sides to avoid conflict over water rights. East of Mari Chaq the boundary had to be drawn north of the Darya-ye Qeysar and west of the Darya-ye Andkhvoy. There was much disagreement over this line as the British commissioners made one last effort to deny Russia any habitable land south of the desert. This effort failed but the commissioners were unable to agree about the boundary from Andkhvoy to Kwaja Salar. This section was the subject of a separate protocol in 1887 and the boundary demarcation was completed in January 1888.


Yugo - Vostochnyye Karakumy
Mary (Merv)
Kerki
Kham Ab
Kwaja Salar
Āmū Daryā
Sardoba Dupchi
Andkhvoy
Sheberghān
Imambaba
Sarakhs
Sary Yazy
Yalgan Kuduk
Dowlatābād
Sar-e-Pol
Kara-Baba
Dowlatābād
Shīr-Tappeh
Pul'-i-Khatum
Sary-Gumbezli
Adam Ulan
Pendjeh
Mārī Chāq (Marūchāk)
Zulfikar Pass
Kushka
Qal'eh-ye vali
Āq Ribāt
Hauz-i-Khan
Bālā Morghāb
Sombeh Kārīz
Chemen-i-Bit
Golrān
Chehel Dokhtarān
Daryā-ye Kāshān
Daryā-ye Morghāb
Daryā-ye Kashk
Herāt
Harī Rūd
Daryā-ye Andkhvoy
Shirin Tagāb
Daryā-ye Qeysār
RUSSIA
IRAN
AFGHANISTAN
CHUL
SELSELEH-YE SAFĪD KŪH
Limits of zone proposed by Russia 26 November 1884
Boundary proposed by Russia 28 January 1885 and accepted by Britain as southern limit of zone 13 March 1885
Northern limit of British zone 13 March 1885
0 20 40 60 Miles
0 20 40 60 80 100 Km.

9 The boundary between Afghanistan and Iran

The 837 km (520 m) of boundary between Afghanistan and Iran was delimited in three sections at different times. In 1872 274 km (170 m) of the line was determined in the Sistan basin in the south of the borderland, and this limit was confirmed in 1905 after disputes about territory and water supplies following major changes in the course of the Darya-ye-Helmand. The northern 161 km (100 m) of boundary through the Hari Rud valley was settled in 1891. These terminal sections were both laid out by British army officers, whose decisions were endorsed by the Afghan and Iranian governments. The central, connecting section of 402 km (250 m) was defined by a Turkish general in 1935, and this officer also removed some doubts about a short section of the northern boundary. The arrangements made for each section were quite separate from each other and it is a tribute to the officers concerned that the total boundary has served both countries very well. These comments are related to the northern and central sections.

The northern area was known as Hashtadan, and it was a semi-arid area where cultivation could only be supported through irrigation. In April 1885 the local Iranian governor ordered that certain khanats near Pardeh should be cleared of sand and repaired. A khanat or karez is an underground canal which taps subterranean sources of water at the foot of apparently dry hills. These canals convey large volumes of water for many miles; they are constructed by digging shafts at intervals, to the required depth, and then tunnelling sideways to connect with flanking shafts. Afghan patrols attacked the labourers sent to do the work, confiscated their tools, and drove them away. A similar pattern of events had occurred eleven years before and this time both governments requested arbitration by the British authorities. General MacLean was sent to the area to investigate the rival claims and propose a definite boundary. After some months gathering evidence in 1888–9 he announced his award in December 1889. The shah of Iran accepted the line immediately, but it was a year before the emir of Afghanistan also concurred, and MacLean marked the boundary with thirty-nine pillars in 1891.

The area of Hashtadan lies southwest of the great northward bend of the Hari Rud at Kuhestan. It is bounded on the north by the Sangitti range; on the south by the Kadaona and Yal-i-Khar ranges; on the east by the watershed which passes through the peak Sang-i-Dukhtar; and on the west by an uninhabited belt of arid steppe which also marks the eastern watershed of the Karat basin. The region measures about 39 km (24 m) along its northwest-southeast axis, and is about 27 km (17 m) wide. It is drained by the river Shorab, which flows northwards through the Shorab pass in the Sangitti range. North of the pass the river is called the Kal-i-Kalla, and this river swings eastwards to join the Hari Rud northwest of Kuhestan. MacLean distinguished three zones in Hashtadan. First, just south of the Shorab pass of the same name, there were the ruins of former villages and obvious signs of previous cultivation. Except on the north the area was surrounded by a level alluvial steppe, which had no signs of surface drainage and practically none of settlement. This steppe zone was surrounded by the gentle slopes leading to the fringing watersheds. MacLean was unable to detect any connection between the drainage of these slopes and the khanats of the steppe and cultivated region although he considered that in time of heavy rains some water from the hills might reach the Shorab.

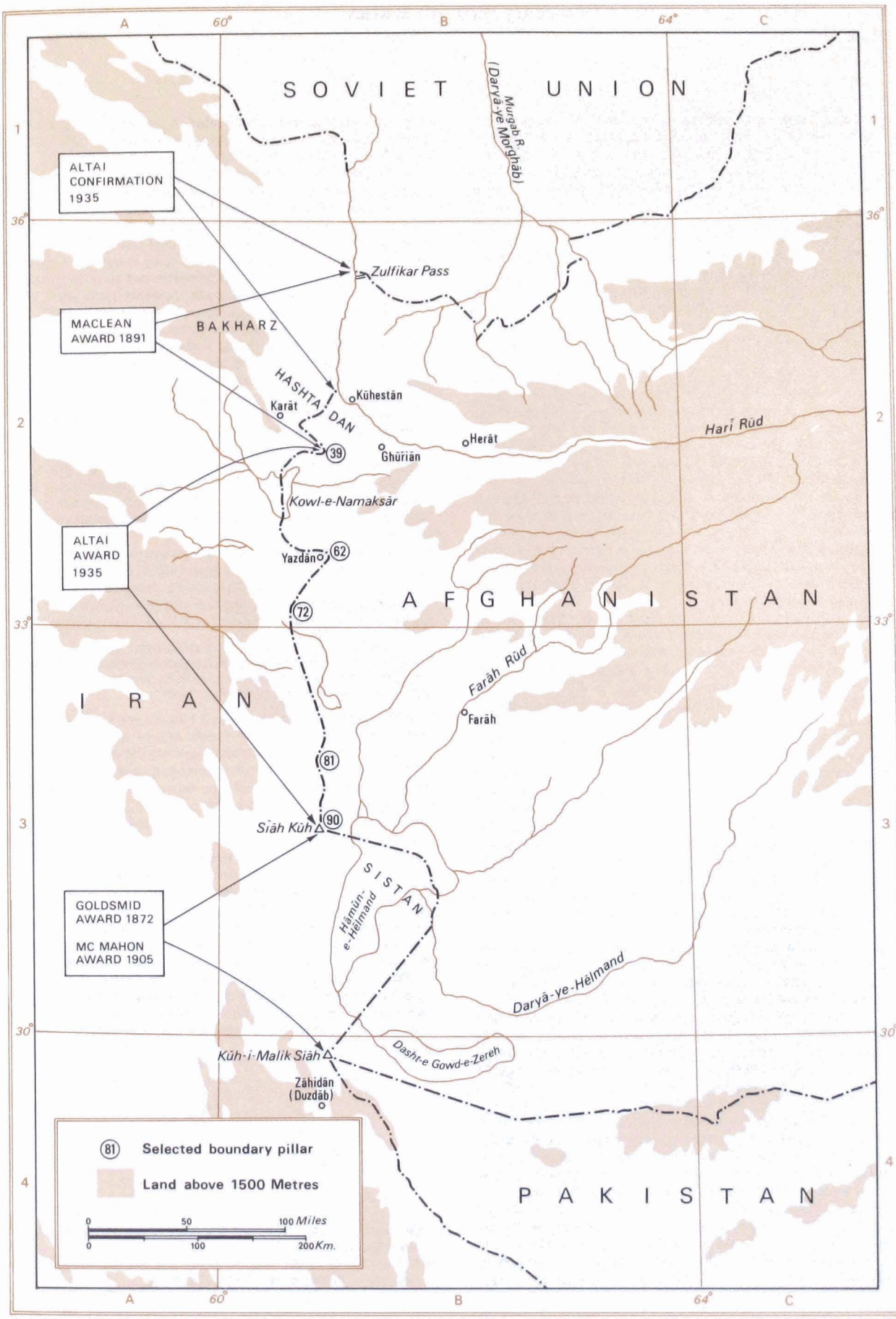
MacLean's field-work led him to three important conclusions. First, the dilapidated condition of the ruins, the barely discernible field patterns, and the khanats choked with sand convinced him that the area had been deserted for a century. He noted that 'neither Persians nor Afghans can produce proofs of recent possession in support of their respective claims, neither having felt inclined to stand the brunt of collisions, in such an exposed locality, with the Turkomans'. MacLean discovered that an epidemic throat disease in 1788 had been a major factor in causing the depopulation of the valley, and the devastation had been completed by 'Uzbek, Hazarah and Turcoman raiders'. Second, the water of the khanats were not solely used in the Shorab valley. MacLean managed to trace an old, large canal which passed through the Shorab pass to 'the Darband and Kafir Kala lands'. This fact was important because Afghanistan possessed these lands, and was able to argue that if Iran controlled the entire area of Hashtadan, potential supplies of water through the Shorab pass would be at risk. In fact the canal through the pass was as choked with sand as the khanats of Hashtadan, but MacLean was trying to reconstruct the economic geography of a century before. His problem was to select a line through or round this wasteland which was historically fair to both sides, so that both would be induced to accept it. His task was not made easier by this third conclusion, which was that despite its present ruinous appearance, Hashtadan had the potential to become a flourishing arable area once more.

Both sides claimed the whole area; Iran insisted that it had been part of Bakharz, while Afghanistan declared that it formed part of Kohsan and Ghurian. Both sides also showed great imagination in providing evidence to bolster their claims; a Persian tombstone dated 1426, title deeds, documents giving power of attorney, and payments of compensation for robbery and damage, were presented by one side or the other. Even though he weighed this evidence carefully, MacLean was no closer to finding the correct historical boundary, and so, like many other arbitrators before and since, he offered a compromise. MacLean's boundary followed the Kal-i-Kalla through the Shorab pass and continued southwestwards to a point due west of Farizna, when the line swung southeast and ended at the southern edge of the Yal-i-Khar range about 34° 20' north and 60° 55' east, at the head of the Chah Surkh valley. The shah's immediate agreement was secured by two small concessions. First the Hashtadan mound with an area of 0.8 hectare (2 acres) was included within Iran; second, the name Hashtadan was written on the Iranian side of the boundary on the award map! Perhaps this strategem enabled the shah to represent the award as a total success for his country.

MacLean did not define the boundary north of the Kal-i-Kalla, presumably because it was understood that it followed that river to the Hari Rud and then that river north to the Zulfikar pass where the Russian-Iranian border began. General Altai made this boundary explicit in his award of 1935.

The conclusion of MacLean's work meant that there was a gap of 402 km (250 m) between his thirty-ninth pillar and the pillar on Siah Kuh, which was the terminus of the Sistan boundary. Occasionally problems arose in connection with land and water rights along the border and in 1928 Iran and Afghanistan agreed to provide commissioners who would live in the borderland and meet regularly to resolve problems which developed. This arrangement did not prove to be a complete answer and in 1934 Iran proposed that Turkey, a country with which both states had cordial relations, should be asked to arbitrate on the boundary. General Fahreddin Altai was appointed by the Turkish government for this task and he worked in the borderland from October 1934 until May 1935. The approximate line of the boundary was already indicated by the two existing termini and Iran's possession of Yazdan; this collection of farms lay almost in a straight line with the termini. Certain features, such as an Afghan cemetery on the southern slopes of the Kadaona range and the large salt lake of Namaksar, persuaded Altai to draw the boundary slightly west of the direct line. His task was easier than that of his British counterparts in Sistan and Hashtadan because there was an absence of settlement and the area possessed only a low economic potential. The only complexity involved the occasional use by nomads' herds of winter pastures after good summer rains, and the quarrying of millstones from some hills, but Altai was able to quickly solve these problems and design an acceptable line, which he demarcated by thirty-nine pillars.

Sykes, Sir P. (1940), *A history of Afghanistan*, 2 vols, London.


A
60°
B
64°
C
SOVIET UNION
Murgab R. (Daryā-ye Morghāb)
ALTAI CONFIRMATION 1935
Zulfikar Pass
MACLEAN AWARD 1891
BAKHARZ
HASHTA DAN
Karāt
Kühestān
Herāt
Harī Rūd
Ghūrīān
39
Kowl-e-Namaksār
ALTAI AWARD 1935
Yazdān
62
72
AFGHANISTAN
IRAN
Farāh Rūd
Farāh
81
90
Siāh Kūh
SISTAN
Hāmūn-e-Helmand
GOLDSMID AWARD 1872
MC MAHON AWARD 1905
Daryā-ye-Helmand
Dasht-e Gowd-e-Zereh
Kūh-i-Malik Siāh
Zāhidān (Duzdāb)
PAKISTAN
81 Selected boundary pillar
Land above 1500 Metres
0 50 100 Miles
0 100 200 Km.
1
2
3
4
36°
33°
30°

10 The Afghan-Iranian boundary through Sistan

The Sistan basin, which has a general elevation of about 550 m (1800 ft), comprises about 18 000 sq. km (7000 sq. m). The basin is the focus of an interior drainage pattern with a catchment of 325 000 sq. km (125 000 sq. m), which originates principally on the eastern and southern slopes of the Afghan plateau. The chief river of this system is the Darya-ye Helmand, which is Afghanistan's largest river. It is a perennial river and floods during the late spring and early summer when melting snow on the uplands augments the early summer rainfall. The other rivers, such as the Khash Rud, Khospas Rud and Farah Rud sometimes cease to flow at the surface in late summer and autumn. The lower reaches of all these rivers are used for irrigation, and surplus water flows into the Hamun e-Helmand, a lake which seasonally fluctuates in area. In spring it may be 8-24 km wide and 160 km in length (5-15 m by 100 m). During extreme floods, as in 1885 and 1903, water from the Hamun e-Helmand drains southeastwards to another landlocked depression called Dasht-e Gowd-e-Zereh. For thousands of years the Darya-ye Helmand and other rivers have been carrying silt into the Sistan basin and constructing a delta in the lake. The growth of this delta has been irregular and there is geomorphological and cultural evidence to show that the Hamun e-Helmand has occupied different locations in the basin. Today as in past periods the Darya-ye Helmand builds levees which eventually means that it is flowing above the general level of the surrounding country. Heavy floods will sometimes breach these levees and allow the river to seek a new course. Further, between May and September this basin is swept by strong north-westerly winds which can remove fertile topsoil and bury settlements, water-holes and crops.

Despite these disadvantages the area is still superior to any surrounding districts for settled agriculture. It was thus a target for conquest by many groups and in 1872, when the boundary was first drawn, Sistan had a complex ethnic structure of 45 000 Persians, Afghans and nomadic Baluchis.

In the period following 1860 there was an increasing number of disputes over water rights between Persian and Afghan groups. Towards the end of that decade Persian advances alarmed the Afghan authorities and a war threatened. It was at this point that Britain belatedly took action under the terms of the treaty of Paris of 1857, and offered to help settle the issue. This offer was accepted by both sides and Major-General F.J. Goldsmid was sent to act as arbitrator. His decision was binding on both parties and he was instructed to take into account both ancient rights and recent occupation. Goldsmid spent two months in Sistan and for most of that time his work was obstructed by the Persian representative. This meant that Goldsmid did not manage to collect all the facts needed and he had to rely largely on oral and written evidence from both sides.

Goldsmid distinguished between Sistan Proper, which was awarded to Persia and Outer Sistan which was given to Afghanistan. Sistan Proper was bounded by the Hamun e-Helmand on the west and north, by the Darya-ye Helmand on the east, and by the Dasht-i-Sangbar in the south. This last feature is a desert plain about 5 km (3 m) wide standing about 21 m (70 ft) above the surrounding plain; it formerly marked the southern edge of the Hamun-e-Helmand. Most of this area was irrigated from the Rud-i-Sistan, a canal into which water was diverted by a dam of tamarisk branches at Band-i-Sistan (McMahon, 217–18). Darya-ye Helmand and its northern distributary, the Siksar river marked the central section of the boundary north of the Band-i-Sistan. South from the dam Goldsmid drew a straight line to a prominent mountain Kuh-i-Malik Siah. He was not able to survey the land through which the boundary was drawn and thus might not have realized that he was partitioning an area known as Tarakhun, which had previously received water via the Rud-e Biaban. The fact that Persia was awarded the irrigable area of Tarakhun while Afghanistan retained the headwaters of the river and canals which could supply the area was guaranteed to ensure that the zone was not rehabilitated. North of the mouth of the Siksar river the boundary followed the southern edge of the Nalzar, or reed bed, as far as Siah Kuh.

In the short term Goldsmid was successful in producing a boundary which averted war between Afghanistan and Persia, but he also offended against most of the cardinal rules in boundary-making. He drew lines through areas he had not visited; made the boundary coincident with physical features such as rivers and the reed beds which were subject to changing locations; he did not demarcate the boundary. It was therefore not surprising that the work had to be done all over again by McMahon thirty years later.

In 1896 an exceptional flood burst the west bank of the Darya-ye Helmand forming a new outlet to the lake called Rud-i-Pariun. This meant that no water flowed through the Siksar channel and the Afghan irrigated areas on the Siksar's east bank were put at risk. The Persians agreed that the Afghans could dam the Rud-i-Pariun, and divert enough water along the Siksar. These friendly arrangements ended in 1902 when there was an exceptional drought and severe competition for water by both groups. A climax was reached when Afghans occupied a Persian village in the tract known as Mian Kangi which lies between the Siksar and the Rud-i-Pariun. This persuaded the Persian authorities to invite British arbitration once more and Colonel McMahon was sent to reconstruct Goldsmid's boundary and to set regulations for the general allocation of water in Sistan.

McMahon's commission was composed of 1500 men, and it spent from February 1903 until May 1905 in Sistan. Afghanistan was most anxious that Goldsmid's boundary should be maintained, but Persia proposed an alteration. Goldsmid defined the boundary south of Band-i-Sistan in the following terms:

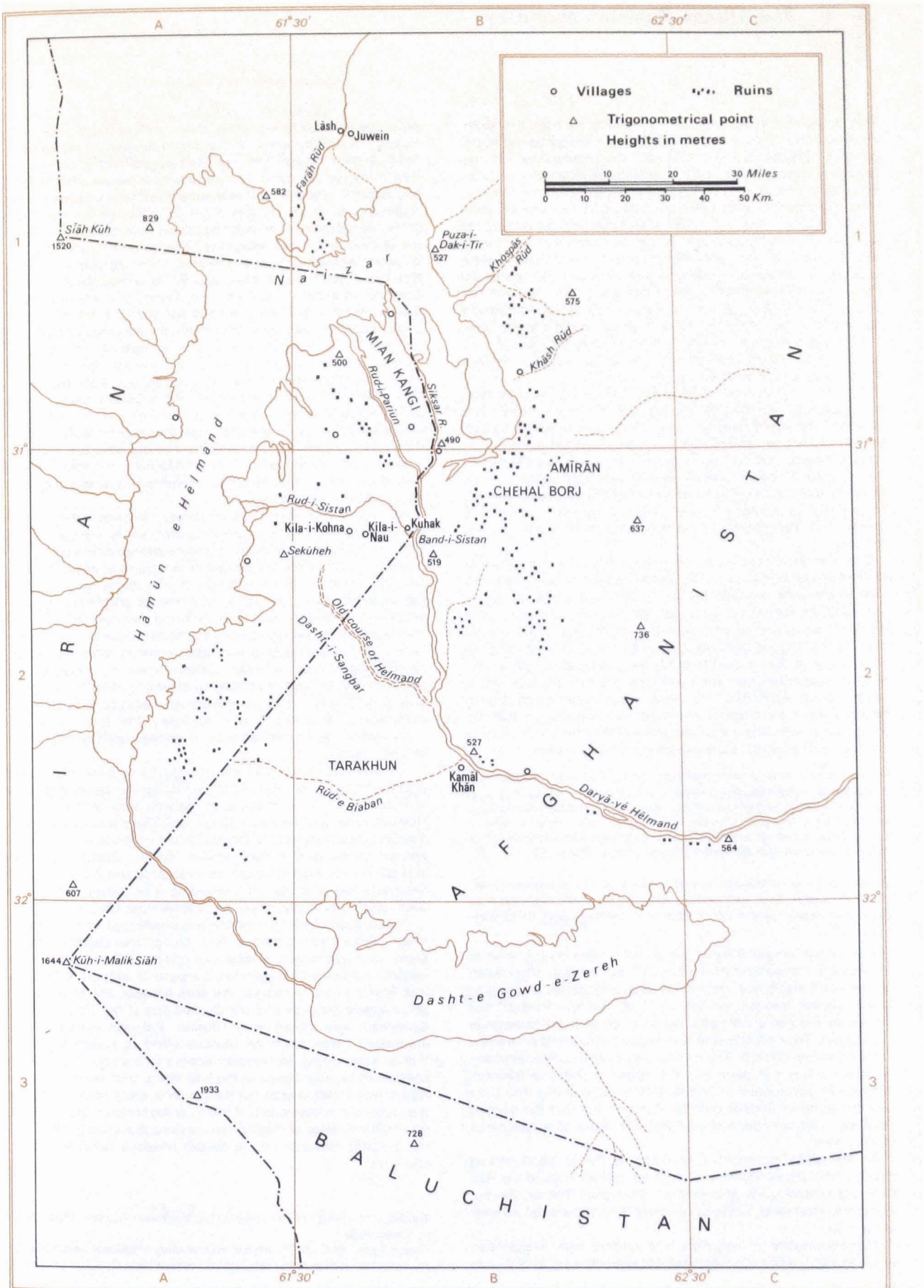
> . . . the line of frontier to the hills south of the Sistan desert should be so drawn as to include within the Afghan limits all cultivation on both sides of the river [Helmand] from the bund upwards, the Malik Siah Koh . . . appearing to be a fitting point (Aitchison, 11: 321).

This has been shown on maps as a straight line between Band-i-Sistan and Kuh-i-Malik Siah. Persia argued that the line could equally well meet Goldsmid's requirements if it was curved closer to the banks of the Darya-ye Helmand, giving Persia a greater share of the Tarakhun. McMahon rejected this argument and carefully marked Goldsmid's line by ninety pillars which were clearly marked on maps accompanying the award.

McMahon then turned his attention to the allocation of water. He discovered from historical research that excess of water was a more frequent problem for cultivation than drought, and that when drought occurred it affected the spring crops when the river was at its lowest. He therefore stipulated Persian water-rights with the needs of spring crops in mind, and decided that one third of the water which flowed via the Darya-ye Helmand at Khamal Khan should be available for Persian use. Unlike Goldsmid's award McMahon's was a model of boundary-making. It is a pity that McMahon is remembered for a devious line between India and China which has created trouble between those two countries, rather than for this line which was meticulously and sensibly measured.

Aitchison, C.U. (1909). *A collection of treaties, engagements, sanads etc.* vol. II, Calcutta.

McMahon, Sir H. (1906). Recent survey and exploration in Seistan. *Geographical Journal*, 28: 209–28, 333–51.


A
61°30′
B
62°30′
C
Villages
Ruins
Trigonometrical point
Heights in metres
0 10 20 30 Miles
0 10 20 30 40 50 Km.
Läsh
Juwein
Farāh Rūd
582
829
Siāh Kūh
1520
Puza-i-Dak-i-Tir
527
Khospās Rūd
575
Khāsh Rūd
500
MIAN KANGI
Rud-i-Pariun
Siksar R.
490
AMĪRĀN
CHEHAL BORJ
637
Rud-i-Sistan
Kila-i-Kohna
Kila-i-Nau
Kuhak
Band-i-Sistan
Seküheh
519
Hāmūn-e-Hēlmand
Old course of Helmand
Dasht-i-Sangbar
736
527
TARAKHUN
Kamāl Khān
Rūd-e Biaban
Darya-yē Hēlmand
564
607
1644
Küh-i-Malik Siāh
Dasht-e Gowd-e-Zereh
1933
728
NIMRUZ
AFGHANISTAN
BALUCHISTAN
31°
32°
1
2
3

11 The Afghan-Pakistan boundary

This boundary extends for 2430 km (1510 m) from the snow-covered peaks of the Hindu Kush in the north to the baked desert plains of Baluchistan in the south. This borderland has two important qualities which help to explain the difficulties faced by British and Afghan authorities when they began to draw this line. First, the physical landscape is generally unfavourable to settlement. A local proverb notes that when Allah finished making the world he dumped the rubbish on the northwest frontier of India and Baluchistan. South of the Khyber pass the availability of water is always a matter of concern, except near the main perennial rivers such as the Kabul, Gumal, Zhob and Bolan. Soils are thin and in the hills and ranges the narrowness of valleys restricts opportunities for irrigation; this is in sharp contrast to the wide, alluvial plains of the Indus. Although the shortage of water is not a problem north of the Khyber pass, the valleys are narrower and the growing seasons are shorter.

Second, the pattern of ethnic communities and political organizations is complex throughout the borderland. The successive waves of conquerors, frontiersmen and nomads which broke across this region have produced a complex mosaic of unique, fragmented cultural communities. In the second half of the nineteenth century when British areas of administration marched with Afghanistan, there were also frequent and complex movements of nomads through this borderland. Some were traders, some sought grazing for their herds, and others searched for work.

The need for a clear boundary through this area was evident to the British government in India, which was painfully aware of the sharp difference between the ordered arrangements in British India and the near anarchy throughout much of Afghanistan. But there was a real dilemma for the British authorities. There was no obvious line and any unilateral limit which Britain placed upon the advance of its forces always produced eventual problems with neighbouring tribesmen who raided into the British areas. When British forces advanced into these tribal areas Anglo-Afghan relations were endangered and there was the chance that the tribesmen would unite in a common anti-British front with the emir in Kabul. Two quotations summarize the British problem:

> In both cases [the British advances into Sind and Punjab] the fundamental underlying cause was the juxtaposition of stability and instability, of ordered government and misrule: the Empire pushing on in its search for a frontier and finding no halting place, no physical or man-made barrier, on which its outposts could be aligned and behind which its nationals could move in safety and freedom (Fraser-Tytler, 122).

> So long as hungry tribesmen inhabit barren and almost waterless hills, which command open and fertile plains, so long will they resort to plundering incursions in order to obtain the necessaries of life (Davies, 179).

In the serried ranges fringing Afghanistan there was nothing to recommend one watershed rather than another. Only a few rivers flowed north-south and they made poor boundaries in a region where similar groups settled on both banks. Further, the tribesmen did not understand the concept of fixed immovable boundaries. Their limits had always fluctuated in direct proportion to their military strength. These facts would have complicated any boundary policy but there was the added problem of frequent changes of government in Britain. Davies commented that India was 'the sport of English political factions' and that the sudden advances and ill-timed retreats were the signs of a disastrous frontier policy.

By the 1890s the effective boundary of British administered districts lay west of the Indus. It started at the mouth of the Hab river and skirted just west of Mehar, Jacobabad, Taunsa, Bannu, Kohat and Peshawar, being never more than 100 km (60 m) west of the river.

The opportunity to negotiate a boundary with Afghanistan arose in 1893, when Sir Mortimer Durand was sent to Kabul to persuade the emir to surrender areas north of the Amu Darya to Russia under the terms of the Anglo-Russian agreements of 1872–3. Sir Mortimer also had the responsibility of cajoling the emir to accept Vakhan and so place himself between British India and Russian central Asia. These were Britain's main aims and the Anglo-Afghan boundary was a bonus, although the mission is generally recalled because it negotiated what became known as the Durand line, which forms the basis of the present boundary between Afghanistan and Pakistan. The agreement on 12 November 1893 might have proved an unsatisfactory basis, because, as a document defining a boundary, it left much to be desired. Most of the boundary was defined by a line on a small scale map which varied significantly in the accuracy with which it portrayed different sections of the borderland. Unfortunately Durand was not accompanied by a surveyor because it was feared that the emir might suspect such an expert as being a spy! When the time came to demarcate the boundary the surveyors found difficulty in relating a line on this small scale map to the landscape. The text of the short agreement did specify some of the districts which fell to both sides, and did describe one short section of boundary west of New Chaman, but these textual definitions only complicated the interpretation of the map, with which they did not always agree.

By 13 May 1896 most of the boundary had been marked by six demarcation teams. The outstanding sections lay north of Chakha pass, in the high Hindu Kush, where no human demarcation was necessary, and astride the Khyber pass which was easily the most sensitive section of the whole border. The teams which marked the boundary faced a number of common problems, amongst which the most important were differing instructions about the interpretation of the agreement by the two governments; maps which did not correspond with each other or with the terrain; overlapping claims to small, prized areas by neighbouring communities; periods of adverse weather and several sections of very difficult terrain. The commissioners managed to solve all the difficulties which arose and adjusted the line so that it corresponded to the realities of the landscape and the distribution of tribal lands.

The boundary from Sikaram peak to Nawa pass was settled after the Third Afghan War. After King Habibulla was assassinated in February 1919 there was a struggle for succession between Nasrulla Khan and Amanulla Khan, which was won by the latter. He attempted to overcome the discontent engendered by the civil war by proclaiming a jihad against Britain. British India was invaded but the Afghan troops were repulsed and Britain dictated the peace terms to the emir, including a boundary through the pass, which was finally agreed on 22 November 1921.

The concept of the Durand line was challenged by Afghanistan when Pakistan was formed in 1947. Afghanistan championed the cause of Pushtunistan, a state comprising Pathan tribes in the western borderlands of Pakistan. It argued, in support of the case, that Britain never controlled the area between the boundary of administered districts and the Durand line at the time the 1893 agreement was signed under duress. Pakistan resisted these arguments which seem an obvious effort to create a puppet Pathan state giving Afghanistan access to the sea. The dispute seemed to be abandoned in the late 1960s, and when President Bhutto was installed after the Bangla Desh crisis of 1971, his first visit outside Pakistan was to the king of Afghanistan. However the new military rulers of Afghanistan revived the issue in 1973 and the problem may continue to disturb relations between the two countries.

Davies, C.C. (1932). *The problem of the Northwest Frontier, 1890–1908.* Cambridge.

Fraser-Tytler, W.K. (1967). *Afghanistan: a study of political developments in central and southern Asia.* 3rd ed., revised by M.C. Gillett, London.


Inner administrative boundary
Land above 2000 Metres
0 100 200 Miles
0 100 200 300 Km.
RUSSIA
AGREEMENT 9 APR. 1895
AGREEMENT 21 NOV. 1894
AGREEMENT 15 APR. 1895
AGREEMENT 8 MAR. 1895
AGREEMENT 26 FEB. 1895
AGREEMENT 13 MAY 1896
AFGHANISTAN
HINDU KUSH
CHITRĀL
KOHISTĀN
BAJAUR
SWĀT
Chakha Pass
Landay Sind (Bashgal R.)
Chanak
Asmār
Arandu
Chartanj Ghāshay (Nawa Pass)
Kābul
Kābul R.
Hari Rūd
Sikaram Peak
Laram Peak
Kurram R.
Khyber Pass
Peshāwar
Kohāt
Rāwalpindi
BIRMAL
Char Khel
Khar Kamar
Bannu
Khwāja Khidr
Domandi
Daryā-ye-Helmand
Qandahār (Kandahar)
Kundar R.
Gumal R.
Jhelum R.
New Chaman
Zhob R.
Taunsa
Quetta
Bolān Pass
Rūdbār
Dasht-e-Gowd-e-Zereh
CHĀGAI
IRAN
BALUCHISTAN
Bolān R.
Jacobābād
Chenab R.
INDIA
BRITISH
Mehar
Indus R.
Hab R.
Karāchi
ARABIAN SEA
A
B
C
64°
70°
1
2
3
4
28°
32°
36°

12 The boundary between Iran and Pakistan

The boundary between Iran and Pakistan stretches for 877 km (545 m), from Gwatar bay in the south to Kuh-i-Malik Siah, the mountain which stands at the tri-junction of Afghanistan, Iran and Pakistan. With the exception of some oases, such as Gorani and Maksotag, this country consists of inhospitable desert with an annual rainfall of 178 mm (7 ins). The region's topography is varied with stark sandstone mesas rising from clay plains near the coast and steep limestone peaks standing like ribs above less resistant sandstones in the Kuh-i-Siahan in the Mashkel valley. The most favoured areas have underground supplies of water, supplemented irregularly by summer floods, which allow the cultivation of date palms, beans, wheat and cotton. The largest of these is a section of the Sarbaz valley in Iran called Dashtiarl. Only in such zones is the population settled, elsewhere the population consists of nomadic pastoralists.

This boundary was settled in three distinct phases. The first phase occurred in 1871 when the boundary was defined from the coast to the Rud-I-Mashkel by Major-General F.J. Goldsmid, who also drew the boundary between Afghanistan and Iran in the Sistan basin. The need for a definite line became apparent in 1868 when General Goldsmid was laying a telegraph cable along the coast, westwards from Gwadar, to provide an alternative means of communication to the submarine cable through the Persian gulf. The borderland between Iran, then Persia, and the British protected state of Kalat was in a state of anarchy. West of the Kej chieftancy there were a number of minor authorities, such as Mand and Zamuran, which had been raiding westwards into Iran. Hughes provided an excellent map showing the location of these groups. These hostile acts provoked retaliation from Iran, which began to extend eastwards at the expense of Kalat. The British government secured the agreement of the Shah to the proposition that British and Iranian officers should lay down a line separating the two territories.

Goldsmid's experience in Sistan was repeated for he received no effective cooperation from his Iranian colleagues, and so he based his award on a rapid survey by Major Lovett and information which he had gathered himself in the period 1861–4. His decisions were made in Teheran in 1871 and accepted by the shah on 4 September 1871 (Curzon, 256-7). Goldsmid defined the boundary in principle by allocating the various chieftancies and small states to Iran and Kalat. Kalat acquired control over Kuhak, Pangjur, Parom, Zamuran, Buleda, Mand, Tump, Nasirabad, Dasht and Kej, while Dizak, Jalq, Kalagan, Bampusht, Sarbaz, Pishin, Bahu Kalat and Dashtiarl were left to Iran. The approximate line of the boundary was marked on a map. With one exception this boundary has survived to the present. The exception involves the former state of Kuhak. Goldsmid, knowing that the shah coveted this territory had made the strongest case possible for placing it in the sphere of Kalat, or leaving it as an independent territory. Soon after the boundary had been agreed the shah raised again the question of Kuhak's status. The British authorities did not want a small independent state in the area, and they did not consider that the area was sufficiently important to risk the cordial relations which had been established with the shah, and so they raised no objections to Kuhak's incorporation into Iran; the area was occupied by Iranian forces in May 1874.

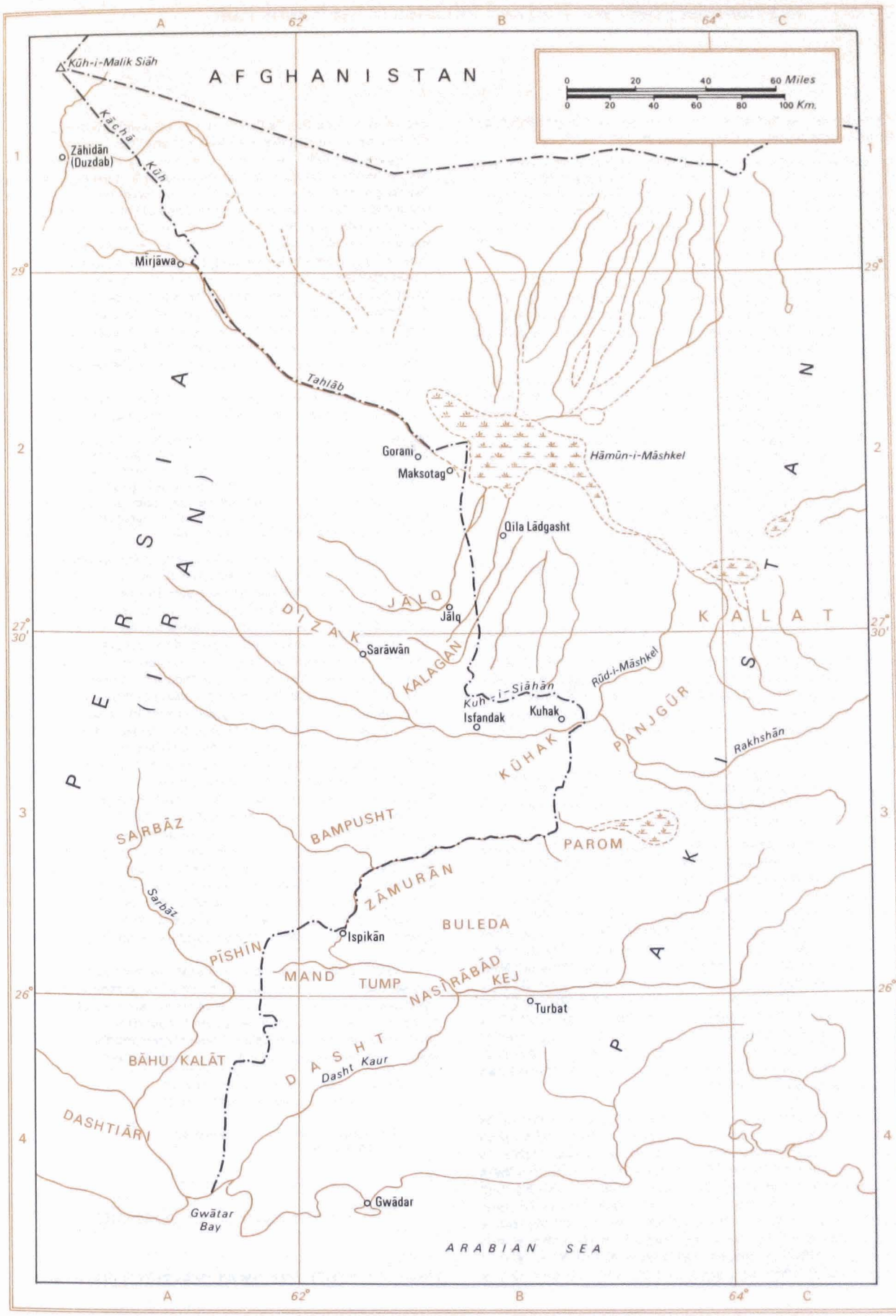
For nearly quarter of a century a gap persisted between the northern limit of the Iran-Kalat boundary in the Rud-i-Mashkel valley, and the southern limit of the Iran-Afghanistan boundary at Kuh-i-Malik Siah. This gap measuring 467 km (290 m) was sealed on 27 December 1895 by an Anglo-Iranian agreement, which marked the beginning of the second phase. The sketch map which accompanied this agreement revealed the paucity of geographical knowledge about this area. As far north as Jalq there were a number of place names, but north of that settlement there were only five names, in a distance of 322 km (200 m), and only Kuh-i-Malik Siah, the northern terminus was near the line. The agreement contained provisions dealing with the formation of a joint commission, which promptly began work in February 1896. The British delegate, Colonel T.H. Holdich was anxious to complete his task before the onset of the hot season and so he persuaded the Iranian delegate to accept published British maps and recent British surveys as being accurate. In fairness to Holdich it must be mentioned that he was also concerned to define a boundary without putting the Iranian delegate within range of the governor of the province of Khurasan, who was under the influence of the Russian consul in his capital.

The survey work began on 28 February 1896 and within sixteen days the line had been defined and marked as far north as the banks of the Tahlab river. Eleven piles of rock or sand and brush had been erected to indicate the location of the boundary, which in three instances deviated from the line set out in the sketch map accompanying the agreement signed two months earlier. First, instead of running the boundary westwards from the Rud-i-Mashkel, along the southern spurs of the Siahan range as far as Bonsar pass, the line was placed along the watershed formed by the range. This was done to ensure that the settlements of Isfandak and Kuhak, which drew water supplies from springs rising on the southern face of the range, should retain control over those springs. Second, the boundary was not carried to the hill which commanded the Bonsar pass from the east. Holdich argued that since the pass was Iranian the Baluchistan authorities should not be given a strategic rise which would make the pass insecure. The third deviation involved a larger area. Instead of proceeding directly northwest towards Kuh-i-Malik Siah from the mid-point between Jalq and Qila Ladgasht, the boundary was deflected north for nearly 45 km (28 m) to the western edge of the Hamun-i-Mashkel. This deflection preserved Iranian control over the northern date groves of Gorani and Maksotag. The Persian delegate was quite sure that the shah could not have realized that the sketch map left these groves to Baluchistan, and he indicated that he would have to refer the matter to Teheran. Holdich was able to accept his arguments because the cession of these oases had been foreshadowed in a letter from Sir Mortimer Durand who drew the sketch map.

All these deviations were in Iran's favour and Holdich used this fact to obtain what he regarded as two concessions. First he arranged for the local Iranian governor to keep the Damanis, who occupied the oases, in check, because they were regarded as notorious raiders. Second he secured the acceptance of the continuation of the boundary along the line he had selected. This line followed a straight line from Kuh-i-Malik Siah for 47 km (29 m) to the Kacha Kuh peak in the range of the same name. From this point the boundary followed the watershed of the range as far as a point 21 km (13 m) from the southern tip of the range, and then proceeded directly to the Tahlab which it followed to link up with the surveyed boundary north of Maksotag.

By 24 March 1896 all the boundary descriptions had been completed and they were incorporated in an agreement which both parties signed. This agreement should have settled the boundary finally but the maps on which the northern section were based were inaccurate, and problems of reconciling the boundary description with the landscape emerged within a few years as the next section shows, when it describes the third phase of boundary evolution.

Curzon, G.N. (1966), *Persia and the Persian question*, 2 vols, London.
Hughes, A.W. (1877), *Baluchistan*, London.


A
62°
B
64°
C
AFGHANISTAN
0 20 40 60 Miles
0 20 40 60 80 100 Km.
Kūh-i-Malik Siāh
Kāchā Kūh
Zāhidān (Duzdab)
Mirjāwa
29°
Tahlāb
Gorani
Maksotag
Hāmūn-i-Māshkel
Qila Lādgasht
PERSIA (IRANI)
BALUCHISTAN
JĀLQ
DIZAK
Jālq
Sarāwān
KALAGAN
KALAT
27° 30'
Kūh-i-Siāhān
Isfandak
Kuhak
Rūd-i-Māshkel
KŪHAK
PANJGŪR
Rakhshān
SARBĀZ
BAMPUSHT
PAROM
Sarbāz
ZĀMURĀN
Ispikān
BULEDA
PĪSHĪN
MAND
TUMP
NASĪRĀBĀD
KEJ
PAKISTAN
26°
Turbat
BĀHU KALĀT
DASHT
Dasht Kaur
DASHTIĀRI
Gwādar
Gwātar Bay
ARABIAN SEA
1
2
3
4

13 The boundary between Iran and Pakistan in the Kacha Kuh

The northern section of the boundary between Afghanistan and Pakistan was defined in the following terms:

From pillar 11 northwards the Talab river becomes the boundary to its junction with the Mirjawa river. From the point of junction it is carried by a straight line to the nearest point on the watershed of the Mirjawa range, which limits the drainage into the Mirjawa river on the north. Thence it follows the main watershed northwards to the highest point of the Kacha Koh. From the highest point of the Kacha Koh the boundary is carried straight to the highest point of the Malik Siah Koh (Prescott, 216–18).

This boundary was based on British maps which Holdich believed were accurate, because they had been prepared by his 'ablest assistants with all the advantage of cold weather atmosphere and ample opportunities'. Holdich was looking for a strong strategic boundary and was convinced he had found one.

There is however nothing to compare with a rugged immovable line of watershed for boundary definition. Every nomadic robber in the frontier understands this, and is perforce obliged to respect it as being beyond the limits of his powers of interference.

It was these considerations which decided me to adopt, if possible, a line of boundary from the Malik Siah Koh to the Mashkel date groves which should be marked by such strong natural features as would render artificial demarcation unnecessary . . . No more perfect boundary than that afforded by mountains and river combined could be devised. The bank of craggy watershed is a feature which stands up like (a) solid wall when viewed across the eastern desert, and the river course winding through the dasht, whilst free from the besetting evils of river boundaries in general is the only sure and certain mark which could possibly be recognisable in such a wilderness as the desert of the Mashkel Hamun (Prescott, 215).

Holdich was so obsessed with the line he had selected that he refused an offer by the Persian representative which would have allowed the boundary to follow the Mirjawa river to its source and on to Zahidan, before turning north to Kuh-i-Malik Siah. Such a boundary would have gained about 1326 sq. km (512 sq. m) for Britain, and given that country control over the glacis of the Kacha Kuh range. Holdich explained why he rejected the temptation in the following terms:

Kalat has no possible claims in this direction, and it would have defeated the object of securing a strongly-marked and almost impassable natural frontier, which will conduce more than anything else to peace and security of the northern borderland (Prescott, 216).

Two sets of criticisms can be levelled against this boundary; the first set deal with its strategic weakness, the second with the problems of identifying the boundary in the landscape. The Kacha Kuh range was not impassable, even in 1896. There are at least nine passes with elevations of less than 1830 m (6000 ft), and many more points marginally above that height which determined forces could cross. The straight line boundary between Kuh-i-Malik Siah and Kacha Kuh peak was criticized on three strategic grounds by McMahon. First, it placed the boundary too close to the British post of Robat Qila which was only 387 m (423 yds) from the line. Second the boundary lay too close to the main trade route leading north to Sistan, and gave Persia springs of water which commanded this trade route. Third, the boundary intersected the alternative route north via Kacha, Bug and Piran Ziarat and deprived Britain of its use.

Two problems must be faced in trying to fit the boundary to the landscape. First, there is no junction of the Tahlab and Mirjawa rivers. These are alternative names for the same river; Tahlab is used towards the south and Mirjawa towards the north, but there is no agreed point at which the change occurs. Holdich's map showed the junction 11 km (7 m) south southeast of Mirjawa, which is shown to lie in latitude 28°59' north. In fact Mirjawa is located at 29°1' north. The name Mirjawa on Holdich's map is shown against the river which today is called Kaurl-i-Khan, and on British maps of 1940, at a scale of 1:253 440, the boundary is shown as leaving the Tahlab 11 km (7 m) south southeast of the confluence of the Mirjawa, Kauri-i-Khan and Dar-i Glaban.

The second difficulty is caused by the use of the term Kacha Kuh, a name which applies to a range of hills and the highest hill in the range. The text could mean that the boundary followed the watershed until it reached the highest point on that watershed and then proceeded to Kuh-i-Malik Siah, or it could mean that it followed the watershed until it reached the Kacha Kuh peak. If only the peak had been located on the watershed the difficulty would disappear, but headward erosion by the Kacha and Piran rivers has pushed the watershed 10 km (6 m) west of the peak. In fact Holdich meant that the boundary should pass through the peak; this is made clear by the report which accompanied the agreement. If this clarification is accepted, there still remains the difficulty of drawing the boundary between the watershed and peak.

Holdich would have avoided these problems if the flying survey party had been sent to visit the area as he originally arranged.

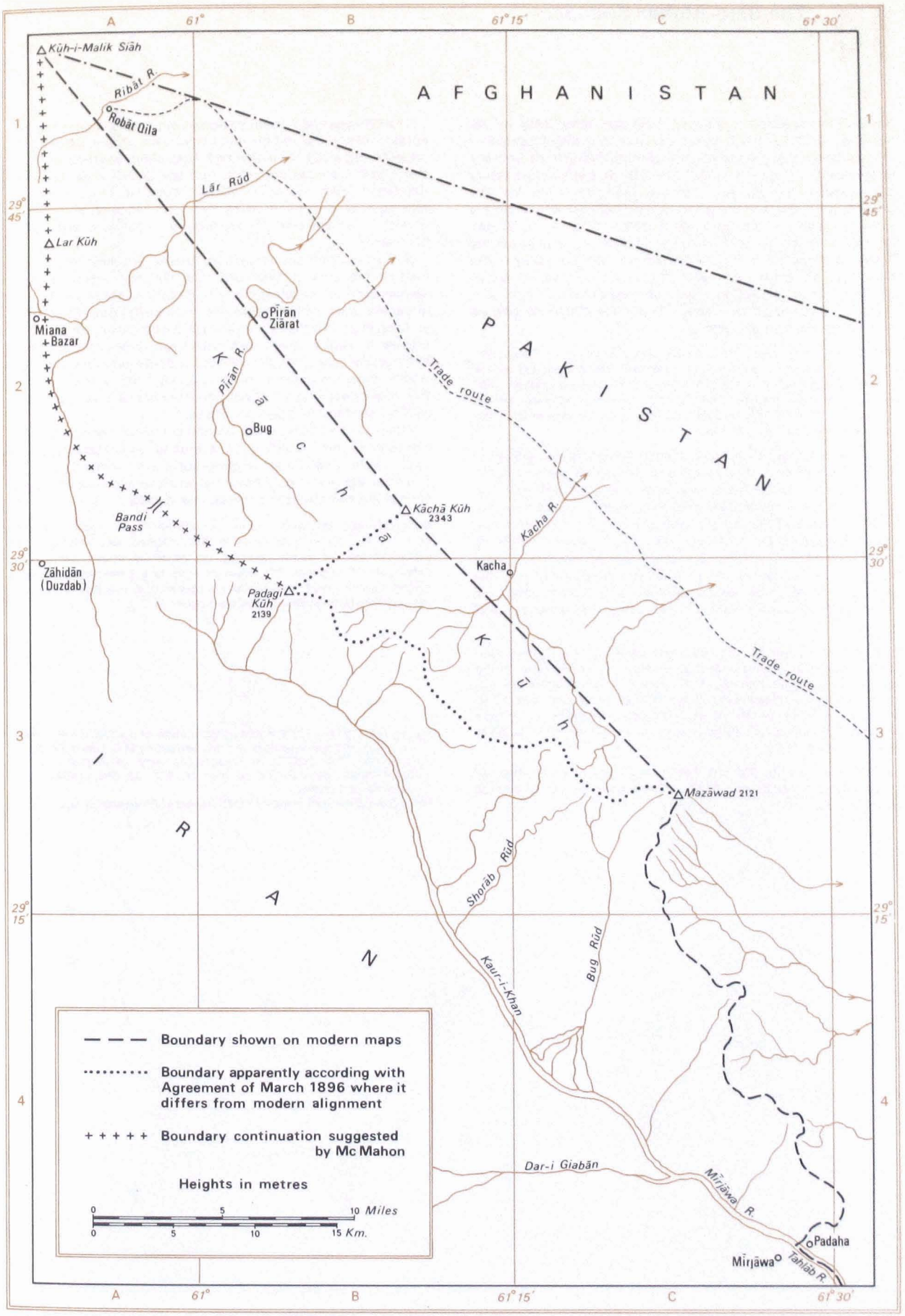
The Itisham [Persian representative] agreed to the proposal to send a flying survey party to demarcate the line provisionally adopted, as already indicated, and to test for accuracy of details; he promised to nominate a high Persian official in order to confirm the final reports as to the nature of the districts north of Ladis. This however depended on the assistance of the Asad-u-Doulah [Persian governor], and that functionary finally failed to make proper arrangements (Prescott, 219).

The British government became aware of the problems in May 1901. A British border officer established an outpost on the west bank of the Tahlab river close to Mirjawa. Promptly a Persian post was established at the same site. It is hard to understand why the British officer thought he had any rights on the west bank of the river. He was instructed to withdraw and he established his post at Padaha. The immediate difficulties disappeared but the British government asked McMahon to investigate the situation.

McMahon criticized the northern section of the boundary along the lines indicated and also suggested that there was some risk that a direct line from the Tahlab to the watershed may deprive Britain of Padaha. He urged that the boundary north of Kacha Kuh peak should be renegotiated and that a firm title should be established to Padaha. McMahon argued for a line along the watershed as far as Padagi Kuh, and then a continuation northwestwards through Bandi pass and Lar Kuh and then to Kuh-i-Malik Siah. He also suggested grounds on which the matter might be raised, including the failure of the flying column to be sent, the failure of the Persian governor to control the Damanis, and the fact that Britain had received no consideration for the three concessions made in the south of the line. The matter was pursued by the British without success, and in 1905 a new agreement simply confirmed the boundary definition produced by Holdich.

In 1957–8 the Iranian and Pakistan governments discussed and settled their boundary on the basis of the agreements already mentioned. The terms of the agreement are secret, which is unusual in respect of international boundaries. It must be presumed that this is a sensitive political area and that one or both sides made concessions which they do not wish to publicize.

Prescott, J. R. V. (1975). *Map of mainland Asia by treaty,* Melbourne.


A
61°
B
61° 15′
C
61° 30′
Kūh-i-Malik Siāh
Ribāt R.
Robāt Qila
AFGHANISTAN
Lār Rūd
29° 45′
Lar Kūh
Miana Bazar
Pīrān Ziārat
Pīrān R.
PAKISTAN
Trade route
Bug
Kachā Kūh 2343
Bandi Pass
Kacha R.
29° 30′
Zāhidān (Duzdab)
Kacha
Padagi Kūh 2139
Trade route
Mazāwad 2121
IRAN
Shorāb Rūd
29° 15′
Kaur-i-Khan
Bug Rūd
Dar-i Giabān
Mīrjāwa R.
Padaha
Mīrjāwa
Tahlāb R.
Boundary shown on modern maps
Boundary apparently according with Agreement of March 1896 where it differs from modern alignment
Boundary continuation suggested by Mc Mahon
Heights in metres
0 5 10 Miles
0 5 10 15 Km.

14 The Sino-Afghan boundary

Afghanistan acquired a common boundary with China by the terms of the 1895 Anglo-Russian agreement; the Vakhan strip was left as a sliver of Afghan territory separating British India from the possessions of Russia in central Asia. The Sino-Afghan boundary was drawn sixty-eight years later in 1963. We know that the Chinese were aware of the terms of the 1895 agreement and the exact location of the boundary's terminus at peak Povalo Shveykovskogo, from the writings of Holdich, who was one of the British commissioners. He ventured down into the valley of the K'a-la-ch'u k'u-erh Ho just before the commission's work ended and was stopped by well-equipped Chinese cavalry charged with maintaining peace on the border. As a result of this meeting he made the following comments:

> There could be no doubt that a careful watch was kept on the border. Macartney soon discovered that not only were our movements on the Pamirs perfectly well known, but that the position of the boundary—even the last decision affecting the Chinese frontier—was also known. Presumably the frontier officials were satisfied and content to leave the matter in our hands (Holdich, 303).

The other terminus of the Sino-Afghan boundary was settled in March 1963 when China and Pakistan defined their common boundary. The Pakistan-Chinese-Afghan junction was specified to be an unnamed peak, 5630 m higher (18 460 ft), at coordinates 74°34' east and 37°03' north. The two termini lay 34 km (21 m) apart, on opposite sides of the K'a-la-ch'u k'u-erh Ho valley, on the watershed which marks the catchment of that river. There seems to be a degree of geographical inevitability that the boundary would follow the watershed, and Fraser-Tytler had predicted the alignment of this boundary many years before it was agreed.

> It seems in fact certain that had the Chinese taken part in the Commission [1895], they would have asserted a claim to possession of the Taghdumbash Pamir, from Bayik [P'i-i-k'o-k'-a] for 40 miles [64 km] westward up to the watershed of the Wajhijir Pass, ever since they reoccupied Eastern Turkestan in 1877, and I do not suppose that anyone would have contested their claim, however shadowy their authority might be (Fraser-Tytler, 345).

Holdich had drawn the *de facto* boundary on his map of Afghanistan in 1900, and it was reproduced in many atlases (Holdich, 596).

The Chinese and Afghan delegates apparently reached speedy agreement and defined the boundary by the names of the various passes lying along the watershed. Both sides attached their own maps to the agreement because maps of this area, based on different sources, are rarely identical. The Chinese have used this technique of both sides using their own maps in a number of boundary discussions to produce a rapid and satisfactory conclusion.

A Sino-Afghan boundary commission prepared a common map of the area in 1964 and this map was attached to the demarcation protocol signed in Kabul in March 1965. The unnamed peak which marks the Afghan-Pakistan-Chinese tri-junction is given different locations in the treaties which China has with each country. The Sino-Afghan treaty defines the location 2' of longitude east of the Sino-Pakistan document. This difference would amount to about 3 km (2 m), but it is safe to predict that in this mountainous region this anomaly will not cause any problems for the Pakistan or Afghan authorities.

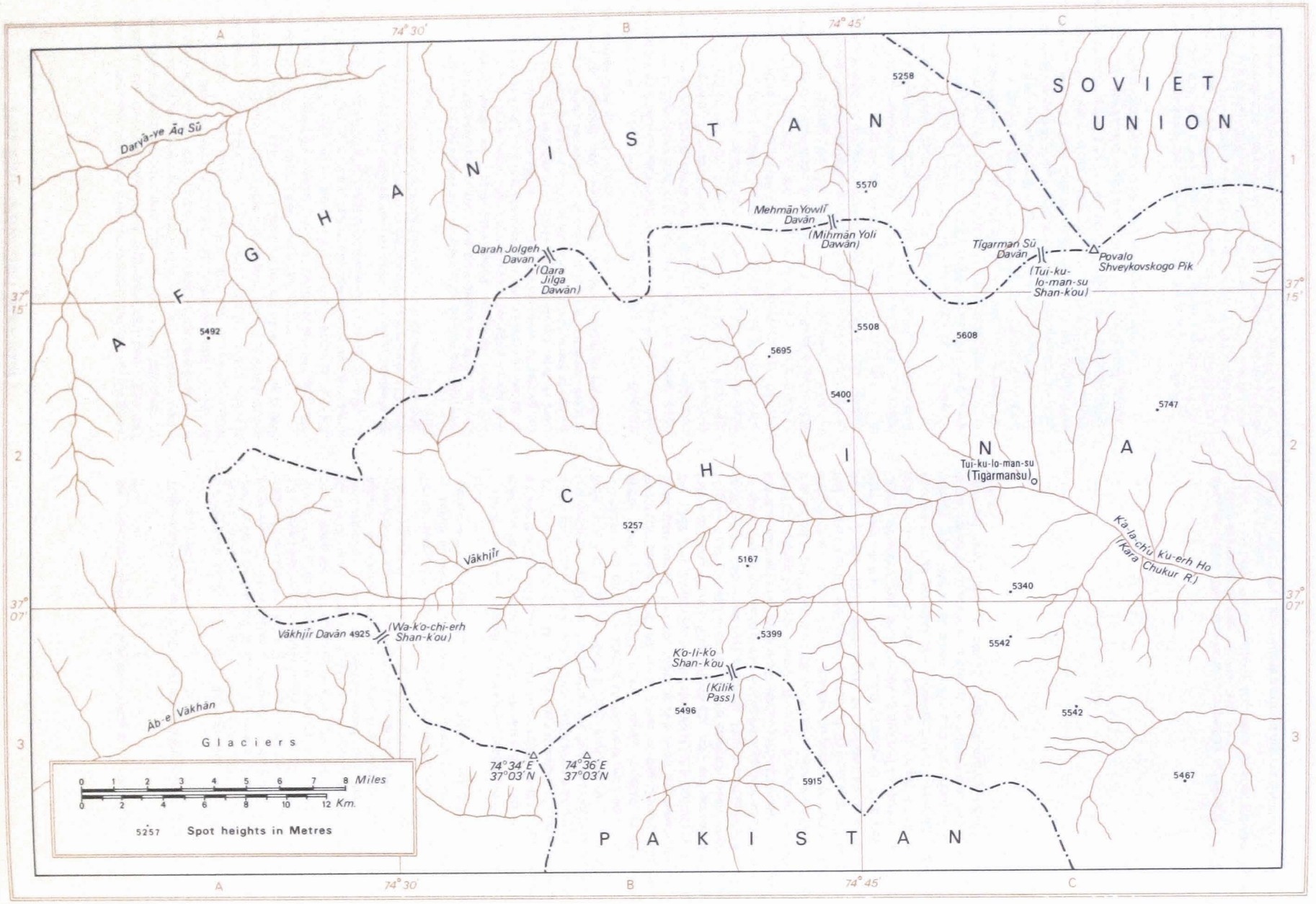
Although the Chinese and Afghan commissioners based their selection of the boundary on a mutual understanding of the area's historical and political geography, it is interesting to reflect that their decision would have met with the approval of General Gerard, the chief British commissioner in 1895.

> Geographically, politically and ethnographically watersheds . . . are the only true and stable boundaries in these regions; and whether in the higher valleys for nomad grazing, or the lower where cultivation is dependent on irrigation, the possession up to the headwaters of each system by one people constitutes the only frontier that has survived the lapse of time (Pamir Boundary Commission, 2).

Fraser-Tytler, W.K. (1967). *Afghanistan: a study of political developments in central and southern Asia.* 3rd ed., revised by M.C. Gillett, London.

Holdich, Sir T.H. (1900). An orographic map of Afghanistan and Baluchistan. *Geographical Journal,* 16: 527–30, 596. (1909). *Indian borderland.* London.

Pamir Boundary Commission (1897). *Report of Proceedings.* Calcutta.


A
74° 30'
B
74° 45'
C
1
2
3
37° 15'
37° 07'
SOVIET UNION
AFGHANISTAN
CHINA
PAKISTAN
Daryâ-ye Âq Sû
Qarah Jolgeh Davan (Qara Jilga Dawân)
Mehmân Yowlî Davân (Mihmân Yoli Dawân)
Tîgarman Sû Davân (Tui-ku-lo-man-su Shan-k'ou)
Povalo Shveykovskogo Pik
Tui-ku-lo-man-su (Tigarmansu)
Vâkhjîr
Vâkhjîr Davân 4925 (Wa-k'o-chi-erh Shan-k'ou)
K'o-li-k'o Shan-k'ou (Kilik Pass)
K'a-la-ch'ü-k'u-erh Ho (Kara Chukur R.)
Âb-e Vâkhân
Glaciers
74° 34' E 37° 03' N
74° 36' E 37° 03' N
5258
5570
5492
5508
5608
5695
5400
5747
5257
5167
5340
5399
5542
5496
5915
5467
0 1 2 3 4 5 6 7 8 Miles
0 2 4 6 8 10 12 Km.
5257 Spot heights in Metres

15 The Sino-Pakistan Boundary

When China and Pakistan concluded an agreement in November 1963 it was the first time that a boundary had been delimited between Chinese Sinkiang and that part of Kashmir occupied by Pakistan. The boundary stretches for 523 km (325 m) from the tri-junction with Afghanistan in the west to the Karakoram pass in the east. The Sino-Pakistan agreement drew protests from the Indian government which alleged that Pakistan had conceded about 34 000 sq. km (13 000 sq. m) to China. This is a claim which is disputed by Lamb (1964) who concludes that the final boundary lay reasonably close to the *de facto* boundary observed by British authorities when they controlled the sub-continent.

Rao who vigorously champions the Indian case and Lamb who reaches conflicting conclusions differ on many aspects of detail, but they are agreed on the reasons why Britain was trying to settle a boundary with China in this area at the end of the last century.

> It is precisely this fulfilment of a Russian desire [to occupy passes in the Pamirs] that I believe can be frustrated by closing up Afghan and Chinese territory to a common frontier line across the belt in question (Ney Elias quoted in Rao, 45).

> Recent reports . . . emphasize the possibility that Sarikul and Rashkam may at a not far distant date pass into the possession of Russia, who might then, unless the Taghdumbash were protected, overlap the boundary just demarcated [the Anglo-Russian boundary in northern Afghanistan in 1895] . . . The present moment, when it may be possible to obtain concessions from China . . . appears favourable for settling the Chinese boundary with Kashmir, Hunza and Afghanistan, and we invite earnest attention to the possibility of effecting an arrangement whereby a definite limit would be placed to possible extensions of Russian territory towards the Mustagh and Karakoram mountains (Elgin to Hamilton, September 1895, quoted in Lamb (1964a), 99).

Britain's fears would have been diminished if a Sino-Russian boundary had been drawn north of peak Povalo Shveykovskogo, but such a boundary did not eventuate and has never been defined in any subsequent treaty. Macartney, a British official in Su-fu, suggested that Britain should attempt to make use of the authority which the Mir of Hunza and the Maharaja of Kashmir claimed to exercise north of the Karakoram range. The Mir used to receive grazing taxes collected by China from nomads in the upper valleys of the north face of the Taghdumbash Pamirs. These rights applied in the Raskem and lower Kara Chukur valleys. Kashmir had once maintained a fort at Shahidulla on the Kara Kash during the Moslem rebellion against China in Kashgaria. Macartney believed that China could be persuaded to recognize these rights in a treaty if at the same time Britain agreed to waive these rights for as long as China was in control of the area. Then the treaty could also stipulate that if China lost control of these areas they reverted to Britain. There is no evidence that China would have accepted this arrangement.

Sir John Ardagh, Director of Military Intelligence, was in favour of a boundary which lay north of the Karakoram range. He regarded the approach to the passes in the Karakoram range as being easier from the north than the south, and as a soldier he preferred to hold the glacis of any range; such control created options of both defence and attack. Ardagh's line included most of the Raskem and Muztagh valleys within the British sphere and coincided with the Kun Lun Shan for much of its length. The British authorities in India were not convinced that China would agree to such a line any more readily than they would recognize claims from Hunza and Kashmir, north of the Karakoram range. The viceroy of the day summarized their position clearly.

> The country between the Karakoram and Kuen Lun ranges is, I understand of no value, very inaccessible and not likely to be coveted by Russia. We might, I should think, encourage the Chinese to take it, if they showed any inclination to do so. This would be better than leaving a no man's land between our frontier and that of China. Moreover the stronger we can make China at this point, and the more we can induce her to hold her own over the whole Kashgar-Yarkand region, the more useful will she be to us as an obstacle to Russian advance along this line (quoted in Rao, 48).

This view held sway and Britain offered the following boundary to China in 1899:

> Commencing at the Little Pamir, from the peak at which the Anglo-Russian Boundary Commission of 1895 ended their work, it runs south-east crossing the Karachikar stream at Mintake Aghazi; then proceeding in the same direction it joins at the Karchenal Pass the crest of the main ridge of the Mustagh range. It follows this to the south passing by the Khunjerab Pass, and continuing southwards to the peak just north of the Shimshal Pass. At this point the boundary leaves the crest and follows a spur running east approximately parallel to the road from the Shimshal to the Hunza post at Darwaza. The line turning south through the Darwaza post crosses the road from the Shimshal Pass at that point, and then ascends the nearest high spur, and regains the main crests which the boundary will again follow, passing through Mustagh, Gasherbrum, and Saltoro Passes by the Karakoram (quoted in Lamb, 1964a, 181–2).

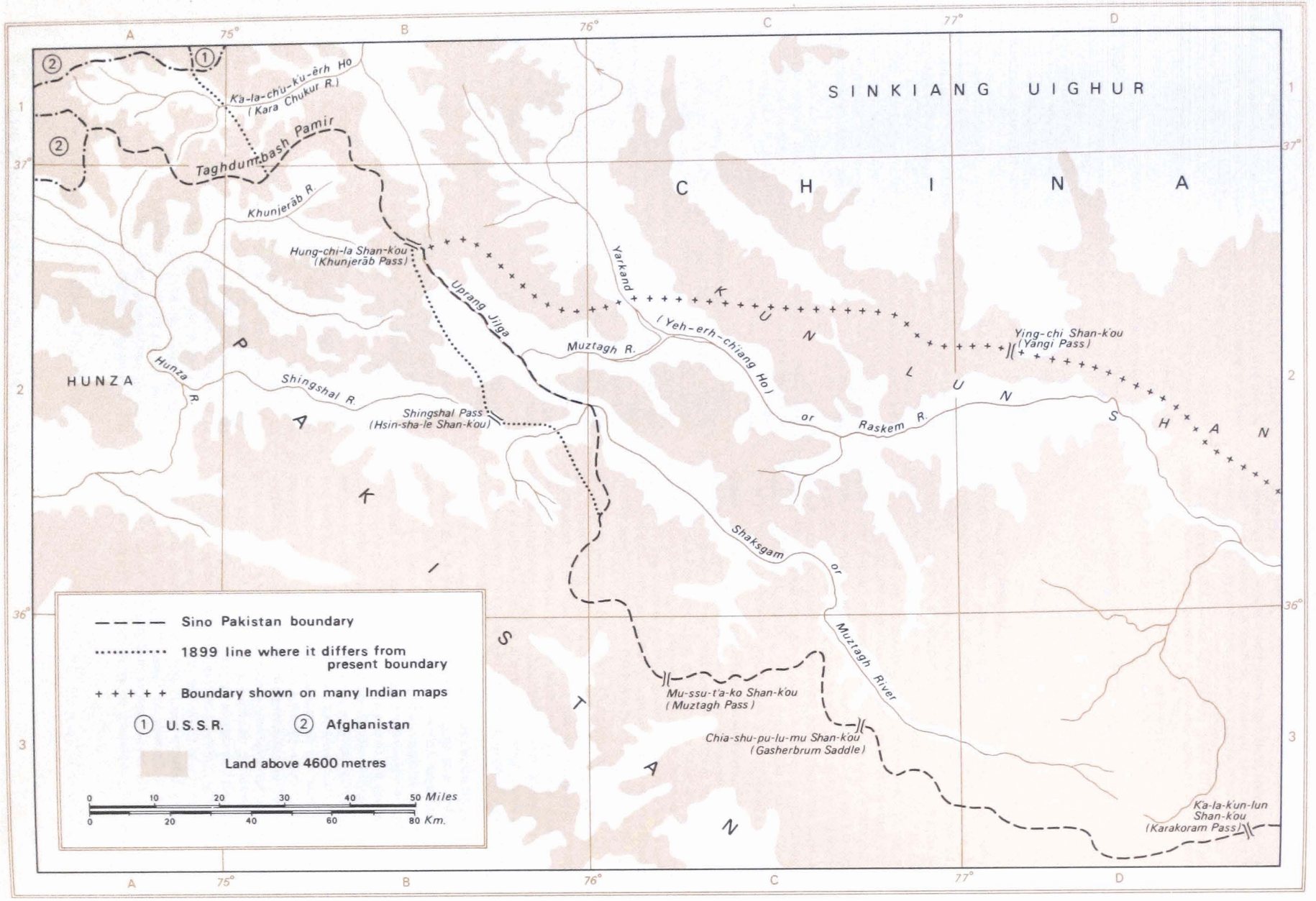
China received this proposal and considered it but did not accept or reject it, and another sixty-four years passed before China agreed with Pakistan about the location of the boundary in this area.

Once again the boundary agreement was accompanied by two maps, one from each country, because they did not precisely agree; the Chinese used similar techniques in their agreements with Afghanistan and Burma. A demarcation commission was appointed under the terms of the fourth article and its work was completed by 26 March 1965, when the final protocol was signed. This has not been published, but apparently a satisfactory common map was prepared and the boundary was marked by about forty pillars which were mainly located in the most important passes and the lower areas in the Uprang Jilga and Shaksgam valley. The boundary shows two main deviations from the 1899 line proposed by Britain. First, the boundary did not begin at peak Povalo Shveykovskogo and cut across the Kara Chukur river. Instead it began on the southern watershed of that valley which remained part of China. This is certainly a deviation of which the British authorities would have approved at the end of the last century; they were most anxious that Chinese and Afghan territory should be coterminous. It seems likely that the 1899 line started at peak Povalo Shveykovskogo because there was no Sino-Afghan boundary and therefore no proper terminus south of the Kara Chukur. Pakistan gained at the expense of China in terms of the 1899 line when the boundary was deflected northwards in the vicinity of the Shimshal pass. This was an even larger deflection than that proposed by Lord Curzon in 1905. The present boundary seems to be fair to both sides, and the agreement was scrupulously observed that when the Kashmir dispute was settled between India and Pakistan, China would negotiate with the sovereign power, providing that, in the event of Pakistan remaining in control, the boundary should not be altered.

Lamb, A. (1964). The Sino-Pakistan boundary agreement of 2 March 1963. *Australian Outlook*, 18: 299–312.

—— (1964a). *The China-India boundary*. Chatham House Essays no.2. London.

Rao, G. N. (1968). *The Indian-China border: a reappraisal*. Bombay.


SINKIANG UIGHUR
CHINA
HUNZA
PAKISTAN
Taghdumbash Pamir
K'a-la-chu-k'u-erh Ho
(Kara Chukur R.)
Khunjerāb R.
Hung-chi-la Shan-k'ou
(Khunjerāb Pass)
Uprang Jilga
Yarkand
(Yeh-erh-chiang Ho)
or
Raskem R.
Muztagh R.
KUNLUN SHAN
Ying-chi Shan-k'ou
(Yangi Pass)
Hunza R.
Shingshal R.
Shingshal Pass
(Hsin-sha-le Shan-k'ou)
Shaksgam or Muztagh River
Mu-ssu-t'a-ko Shan-k'ou
(Muztagh Pass)
Chia-shu-pu-lu-mu Shan-k'ou
(Gasherbrum Saddle)
K'a-la-k'un-lun Shan-k'ou
(Karakoram Pass)
Sino Pakistan boundary
1899 line where it differs from present boundary
Boundary shown on many Indian maps
1 U.S.S.R.
2 Afghanistan
Land above 4600 metres
0 10 20 30 40 50 Miles
0 20 40 60 80 Km.
A B C D
75° 76° 77°
37° 36°
1 2 3

16 The Sino-Indian dispute over the Aksai Chin

The Aksai Chin is a barren plateau containing a number of salt lakes which form the focus of an internal, land-locked drainage pattern. It lies between the diverging ranges of the Karakorum and the Kun Lun. The general surface is 4900–5300 m (16 000–17 000 ft), but the western Loqzung range rises to 6000 m (19 500 ft). This range trends northwest-southeast and is continued into Tibet by the eastern arm: it separates the drainage basins of the Aksai Chin salt lake and the Tso Thang and Sarigh-yilganing lakes to the south. It is an area used in past times only as a route from the subcontinent to Sinkiang, and from Sinkiang to Tibet, for salt supplies, and for summer pasture. Today its main function is to provide good access from Sinkiang to Tibet. It was the construction of a road by China from Yeh-ch'eng to P'ulan in 1956 which revealed the seriousness of this dispute. The Indian authorities referred to the road in October 1958 and also asked the whereabouts of Indian patrols sent into the area. The Chinese soon replied stating that the Indians had been detained on the road and deported from China via the Karakoram pass. A year later the most serious clash occurred when nine Indians were killed in a skirmish in the Changchenmo valley, which is an east bank tributary of the Shyok river.

There has been a wealth of correspondence between India and China over their various boundary disputes and it is possible to identify their positions and disagreements fairly closely. First, China insists that the boundary has never been formally delimited, whereas India insists with equal firmness that the boundary has been settled in a number of treaties. The treaties cited apply to different sections of the boundary. For the area lying north of Shipki La, the Indian authorities refer to two treaties dated 1684 and 1842. The first treaty btween Tibet and Ladakh stated that 'the boundaries fixed in the beginning, when Skyid-lda-ngeema-gon gave a kingdom to each of this three sons, shall still be maintained', while the later treaty, involving Tibet and Kashmir, refers to 'old established frontiers' (Government of India, 35–6). India also claims to possess a letter written by a Chinese imperial commissioners in 1847 which includes the following statement:

> Respecting the frontiers I beg to remark that the borders of those territories have been sufficiently and distinctly fixed, so that it will be best to adhere to this ancient arrangement and it will prove far more convenient to abstain from any additional measures for fixing them (Government of India, 35–6).

China rebuts this Indian view by demonstrating that neither of the treaties actually say where the boundary is, and by recalling that at various times Britain tried to negotiate a boundary in this area with China. It is also claimed by China that no credence can be attached to the 1842 treaty because it involved Chinese Sinkiang without China being a party to it. India disagrees with this point. It seems that here logic favours China's position. The Indian evidence establishes that there was a traditional boundary, which is not disputed by China; it does not establish where the boundary lay.

India claims that the boundary south of Shipki La was effectively settled by the 1954 Sino-Indian agreement, the fourth article of which specifies six passes through which travellers and traders of both countries may travel. For India the significance of the agreement is that each pass is on the boundary. China on the other hand is quite certain that the passes are entirely within China and that boundary questions were excluded from the discussions. Both sides have produced conflicting accounts of the discussions and drafts which preceded the final form of this article. It is certainly true that the agreement makes no mention of the passes being located on the boundary; it is equally possible that both sides formed the interpretations they now postulate during the discussions associated with the agreement.

The second major disagreement concerns the locations of the traditional boundary. It is evident from the map opposite that in terms of the areas under contention the borderland can be divided into two sectors. South of Spanggur Tso there are five disputed areas, of which the largest involve the regions around Pa-li-chia-ssu and Sang. North of Spanggur Tso there is the single large area of Aksai Chin under dispute; the total area is about 25 900 sq. km (10 000 sq. m). It is not an easy task to establish a traditional boundary, and Murty (1968), once deputy secretary to the Indian cabinet, has written an interesting paper on the problems of fixing a traditional boundary by careful interpretation of the evidence. Both sides furnished a great deal of evidence showing that their predecessors in government had collected revenue from the disputed zone, had punished wrongdoers living there, had referred to the area in legislation, and had introduced measures for the protection and economic welfare of citizens and travellers in the Aksai Chin. Both sides also produced many maps. India claims to have furnished 630 pieces of evidence compared with 245 items from the Chinese side, but this is not a question where it can be assumed that each item is of equal value. Indeed, it is unlikely that this dispute will be settled by the dispassionate sifting of documentary evidence about the location of the traditional boundary. This is a matter of power politics and if the issue is settled it will be settled on the balance of political arguments.

Lamb has written a detailed account of Britain's chief attempt to draw a boundary through this district in 1899, when they tried to fix a Sino-British boundary from Afghanistan eastwards to Tibet. The western sector of this proposed line has already been considered under the heading of the Sino-Pakistan boundary. The continuation of the proposed British boundary east of the Karakoram pass was described in the following terms:

> . . . from the Karakoram Pass the crests of the range run nearly east for about half a degree (100 Chinese *li*), and then turn south to a little below the 35th parallel of North Latitude. Rounding then what in our maps is shown as the source of the Karakesh, the line of hills to be followed runs north-east to a point east of Kizil Jilga and from there, in a south-easterly direction, follows the Lak Tsung Range [Loqzung] until that meets a spur running south from the Kuen Lun Range, which has hitherto been shown on our maps as the eastern boundary of Ladakh (Lamb, 7).

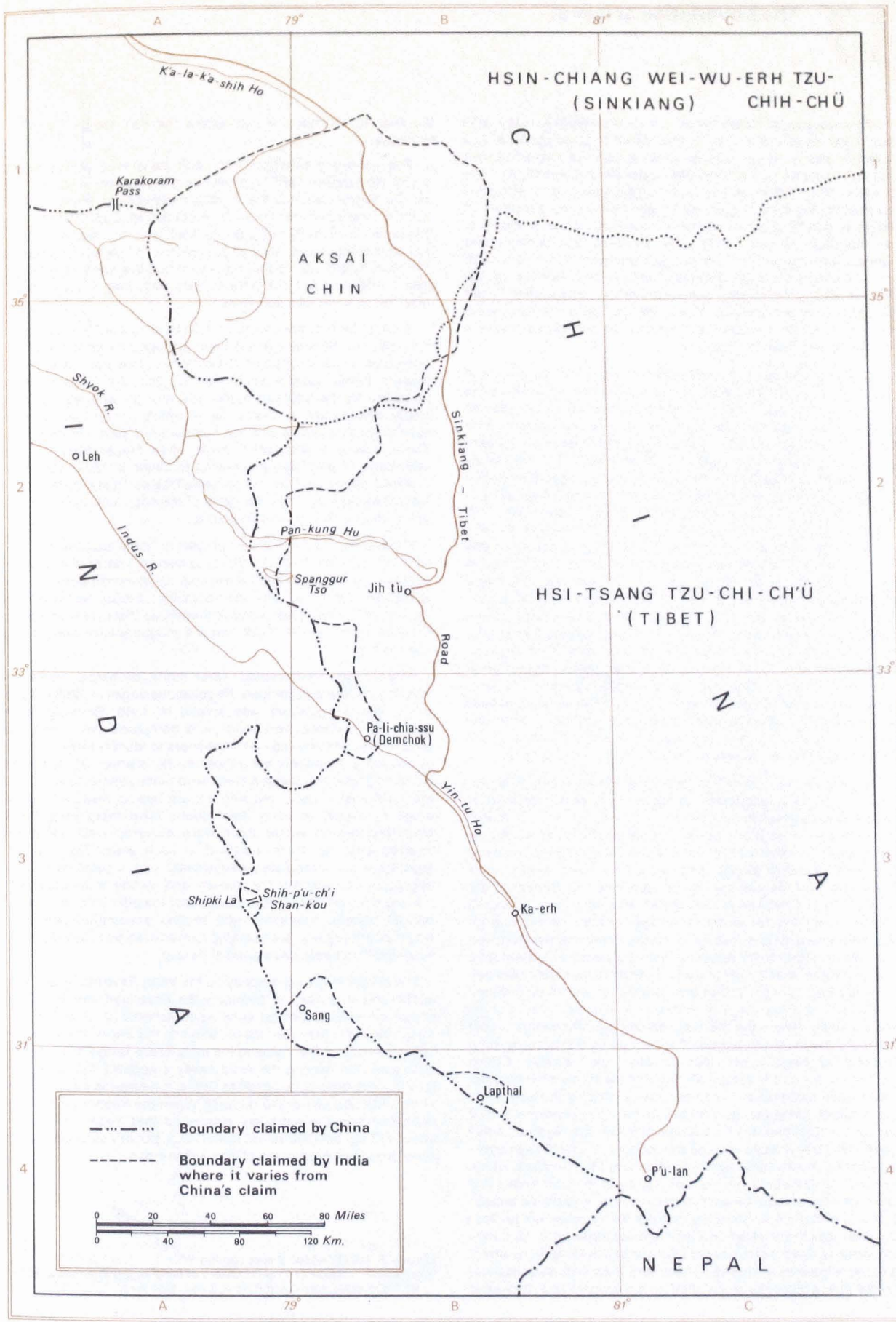
That boundary traced on modern maps would divide the area in dispute between India and China. Clearly the views of imperial Britain eighty years ago cannot be considered binding on either of the modern Asian powers, although both sides have referred to this proposal in presenting their case. China uses the proposal as evidence that the boundary has never been formally delimited while India, quoting an inaccurate version of the description, tries to find justification for its northern boundary in the Aksai Chin.

Lamb makes one telling point in China's favour. He notes that the western edge of the boundary between Tibet and China, shown in the map accompanying the 1914 convention which produced the McMahon Line, corresponds closely to the northernmost boundary claimed by India. Clearly this line cannot separate China and Tibet and China and India at the same time; there must be Tibetan territory south of the line.

Government of India, Ministry of External Affairs (1959). Notes etc. between the Governments of India and China, *White Paper No. 11.*. New Delhi.

Lamb, A. (1973). *The Sino-Indian border in Ladakh.* Canberra.

Murthy, T. S. (1968). Evidence on traditional boundaries and some problems in its interpretation. *Indian Journal of International Law*, 8: 479–514.


A
79°
B
81°
C
K'a-la-k'a-shih Ho
HSIN-CHIANG WEI-WU-ERH TZU-
(SINKIANG) CHIH-CHÜ
Karakoram Pass
AKSAI CHIN
C
H
I
N
A
Shyok R.
Leh
Sinkiang - Tibet Road
Pan-kung Hu
Spanggur Tso
Jih tù
Indus R.
HSI-TSANG TZU-CHI-CH'Ü
(TIBET)
Pa-li-chia-ssu (Demchok)
Yin-tu Ho
Shipki La
Shih-p'u-ch'i Shan-k'ou
Ka-erh
Sang
Lapthal
P'u-lan
N E P A L
Boundary claimed by China
Boundary claimed by India where it varies from China's claim
0 20 40 60 80 Miles
0 40 80 120 Km.
35°
33°
31°
1
2
3
4

17 The boundaries of Nepal

The rectangular boundary between India and Nepal is nearly 1600 km (1000 m) long and can be considered in three sections. The western and eastern sections coincide with the rivers Kali and Mechi respectively. These rivers follow direct courses from the crest of the Himalayas to the Ganges plain. The longer third section linking these two rivers forms the southern boundary of Nepal and generally coincides with the southern limit of the Terai or outcrops of the Siwalik hills, such as the Dundwa and Someswar ranges. The Teral is a forested tract about 32 km (20 m) wide which stands between the forested foothills of the Himalayas and the marshy grasslands of the Ganges plain. It had an unfavourable reputation during the first half of the nineteenth century because malaria was endemic and because it was a refuge for brigands and rebels.

In 1792 the Chinese repulsed a Nepalese attack into Tibet and the attention of the Nepalese authorities became focused on the areas east and west of the Himalayas and south on the Ganges plain. Britain had established some commercial contacts with Nepal at the beginning of the last century and these relations were the subject of treaties signed in 1792 and 1801. This last treaty was frequently breached by Nepal and it was abrogated by Britain in 1804. This action seemed to be the signal for an active policy of encroachment by the Nepalese into British India. Over 200 villages had been annexed by Nepal by 1812 (Wheeler, 2: 543), including the village of Bhimnagar which was unquestionably British. This settlement was recaptured by British forces and in 1814 an ultimatum was presented to Nepal and rejected. Nepal was defeated and agreed to the British peace terms in December 1815. This treaty fixed the Kali and Mechi boundaries as the western and eastern limits of Nepal and they have survived to the present day. Nepal was also compelled to cede the Teral between the Kali and Kosi rivers; Britain already had taken possession of the Terai between the Rapti and Gandak rivers. The only concession to Nepal was the payment of a British pension to those chiefs adversely affected by the cession of the Teral. Soon the Nepalese began to question whether the term 'lowlands' in the treaty referred to all the Teral or only the marshy grasslands.

This query allowed Britain to reconsider the value of holding the Terai. As it was a notoriously unhealthy zone of no commercial value it was decided to restore some of these lowlands to Nepal and save on the pensions being paid to Nepalese chiefs. A new treaty dated December 1816 restored the Teral between the Rapti and Kosi rivers to Nepal, and provisions were made for a commission to demarcate 'a straight line of frontier'. The boundary was fixed the following year and has survived to the present time. The surveyors faced the problem of drawing an east-west line across a featureless plain where the rivers flowed north-south. They achieved their task by constructing smooth, nearly straight lines to separate farm and village lands between the rivers, and by connecting them with short sections following the rivers. The only exception to this pattern occurred east of the Gandak valley, where the crest of the Someswar range formed the boundary for its entire length. The remaining Terai lands were returned to Nepal after that country had assisted British authorities during the Indian Mutiny. By the treaty of November 1860 Britain returned the Terai between the Kali and Rapti rivers and a small triangular area between the Rapti and the British territory of Gorakhpur. The boundary linking the Rapti and Kali rivers was surveyed and marked by masonry pillars; the surveyors were able to make some use of the Kali and Mohan rivers, where they swung eastwards on the plain, to form the boundary. This successful conclusion meant that the only undemarcated section lay north of Gorakhpur in the vicinity of the Dundwa range. That gap was closed in 1875 when a joint survey team drew a boundary connecting the 'foot of the lower spurs where they meet the plain'. The whole boundary between Nepal and India has been marked by 894 pillars from the tri-junction with Sikkim at Phalut peak in the east to Barmdeo Mandi where the Kali issues from the Himalayas.

The boundary between China and Nepal was settled by the treaty of October 1961; it stretches for 1236 km (768 m). The border region includes the highest mountains in the world with several peaks in excess of 6100 m (20 000 ft). Southward flowing rivers, such as the Karnali, Bhota Kosi, Sun Kosi and Arun have cut back more vigorously than the northward flowing tributaries of the Ya-lu-ts'ang-pu, so that the watershed lies north of the crest. The borderland has a tundra climate, with long severe winters followed by short mild summers.

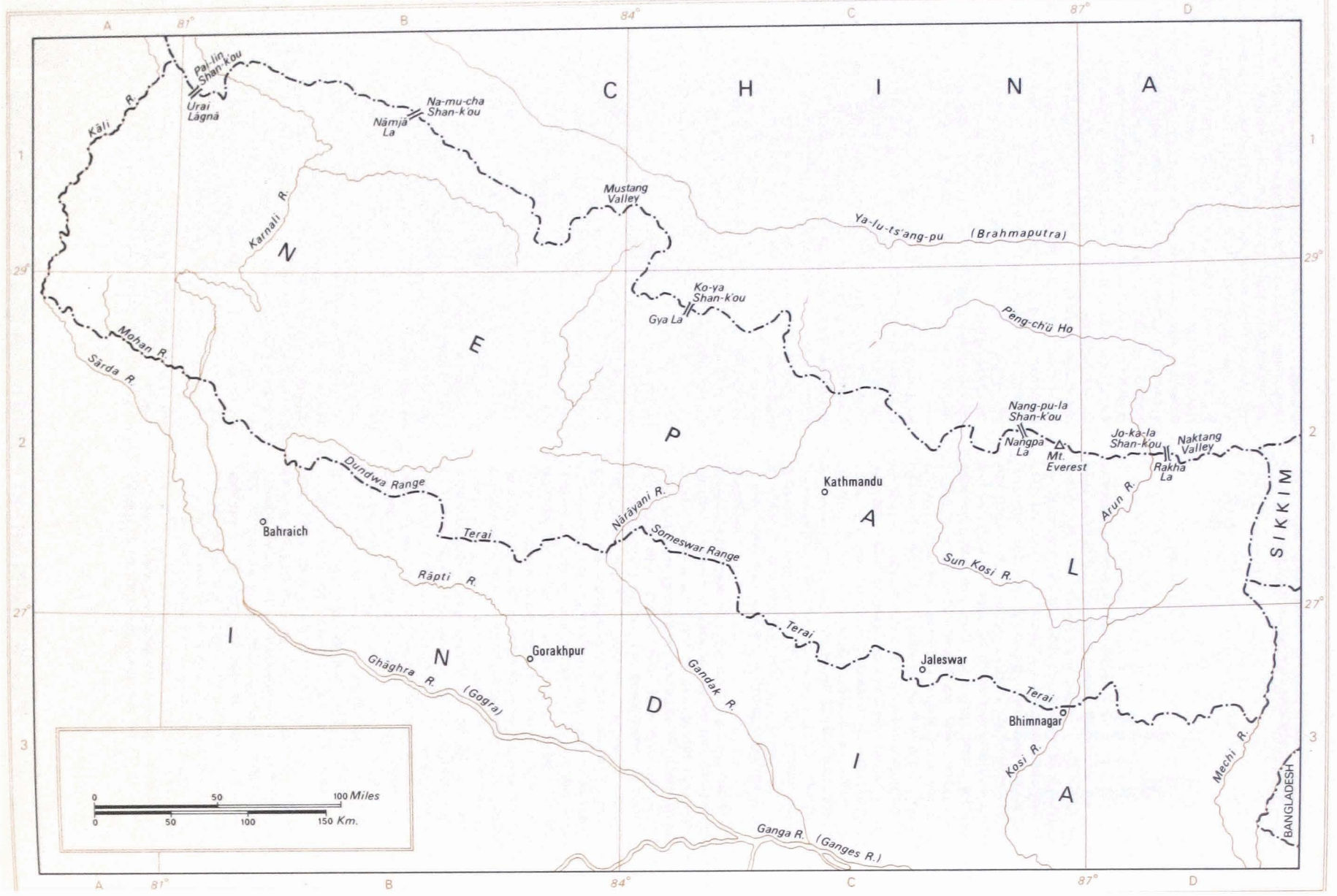
It might be thought that such a forbidding barrier would have insulated the Nepalese and Tibetan groups, but on a number of occasions Nepal invaded northwards into Tibet. In 1789 and 1792 Nepal's forces gained such victories that the Tibetan rulers appealed to the Chinese authorities and these allies defeated Nepal and forced a peace on it which recognized Chinese suzerainty over Nepal and the quinquennial payment of tribute. There was a further brief flurry when Nepal tried to take advantage of the Taiping rebellion in China in 1854, but China restored peace and by a Nepalese-Tibetan treaty, dated 1856, Nepal restored to Tibet the ryots of Kerong, Kuti, Junga, Tagla Khar, Chewur Gumba and Dharkling.

The last payment of tribute by Nepal to China occurred in 1908, although Landon (1928 2: 101-2) is certain that on the last few occasions tribute was paid there was no Nepalese admission of vassalage. After the Chinese revolution began Nepal sought international recognition and succeeded, so that by the end of the Chinese revolution in 1949 Nepal's independence was clearly established.

When China re-occupied Tibet some problems along the border with Nepal developed. Negotiations began in 1956 to solve them, and a boundary was settled in 1960. Both countries provided their own best maps and compared them, and this comparison enabled the commissioners to identify three sections of boundary. First there were those sections where the two maps were in agreement. Second there were those segments where the maps differed in detail but where there was no dispute over the areas belonging to each jurisdiction. Third there were those boundary sectors where there were disagreements about the location and the areas attached to each state. The first two sections were immediately demarcated and a commission was appointed to examine the terrain and define a boundary by making adjustments in 'accordance with the principles of equality, mutual benefit, friendship and mutual accommodation'. The whole boundary was successfully demarcated by 5 October 1961 when the final treaty was signed in Peking.

The official maps accompanying the treaty have not been made public and it is hard to compare the described line with lines shown on available maps such as the sheets produced by the American Army Map Service in 1955 and the British War Office in 1953 at scales of four miles to the inch. There is only one obvious difference. On leaving the Arun valley it appears that a strip of territory has been transferred to China; it measures about 1.6 km (1 m) wide and 16 km (10 m) long. When the treaty's terms were published some newspapers suggested that Nepal had gained about 777 sq. km (300 sq. m) from China, but this calculation may result from the comparison of inaccurate maps.

Landon, P. (1928). *Nepal.* 2 vols, London.
Wheeler, J. T. (1900–1). *A short history of India and of the frontier states of Afghanistan, Nepal and Burma.* 2 vols, New York.


A
81°
B
84°
C
87°
D
1
2
29°
27°
3
CHINA
NEPAL
INDIA
SIKKIM
BANGLADESH
Pai-lin Shan-k'ou
Urai Lagna
Kali R.
Na-mu-cha Shan-k'ou
Nämjä La
Karnali R.
Mustang Valley
Ya-lu-ts'ang-pu (Brahmaputra)
Ko-ya Shan-k'ou
Gya La
P'eng-ch'ü Ho
Mohan R.
Särda R.
Nang-pu-la Shan-k'ou
Nangpa La
Mt. Everest
Jo-ka-la Shan-kou
Rakha La
Naktang Valley
Dundwa Range
Kathmandu
Bahraich
Terai
Näräyani R.
Someswar Range
Arun R.
Sun Kosi R.
Räpti R.
Gorakhpur
Ghäghra R. (Gogra)
Gandak R.
Jaleswar
Terai
Bhimnagar
Kosi R.
Mechi R.
Ganga R. (Ganges R.)
0 50 100 Miles
0 50 100 150 Km.

18 The boundaries of Sikkim and Bhutan and the McMahon Line

Only Bhutan's southern boundary has been defined by published documents, although the other boundaries seem to be well-established. The defined boundary with India stretches for 483 km (300 m) along the northern edge of the Teral, which in this region is identified by the collective name of Duars. This transition from the high mountains to the plains is similar to those found in the west between Nepal and India. Much of the area is composed of huge alluvial fans created by rivers debouching from the mountains to the plains. These fans have coalesced to form a continuous zone about 35 km (22 m) wide through which the rivers pursue varying courses. Much of this area is covered by hardwood forests but some extensive tea gardens have been created. This was an area of conflict between highlanders and plainsmen before the British invasion, with the former occupying the zone in the cool dry season and the latter holding sway during the hot, moist, unhealthy summer.

Official British contact with Bhutan began in 1773 when Britain responded to a call for assistance from Cooch Behar which was being attacked by Bhutan. Cooch Behar was placed under British protection, the Bhutanese were driven back into the hills and Britain concluded a generous peace with Bhutan which left that country in control of the Duars. From then until 1865 there was often friction along this border. The problems became acute in respect of the seven Assam Duars, which lay east of the Manas river, after Britain annexed Assam in 1826 at the end of its war with Burma. After fifteen years Britain annexed the Assam Duars by a unilateral act and twenty-three years later in 1864 Britain annexed the remaining twelve Bhutan Duars adjoining Bengal.

The Indian government inherited this boundary with independence and in 1950 India retroceded 83 sq. km (32 sq. m) around Dewangiri to Bhutan. This strategic area at the mouth of the pass had been annexed by Britain in 1864; its return underlines the good relations between Bhutan and India.

The boundary between Sikkim and China was established in March 1890, and it was the only boundary firmly agreed by China in the Himalayas before the treaty with Nepal in 1961. When Britain established a protectorate in Sikkim in 1861 it was understood that eventually it would be necessary to determine the northern limit of British authority. Sikkim was for Britain the gateway to Tibet and some British officers were anxious to make use of that route to promote trade with Tibet, to secure military intelligence and to exert political influence. One of the proponents of this forward policy was Macaulay who was about to lead a mission to Tibet when the Sino-British treaty regarding the northern boundary of Burma was concluded. Britain agreed to abandon the mission and conduct future relations with Tibet through China.

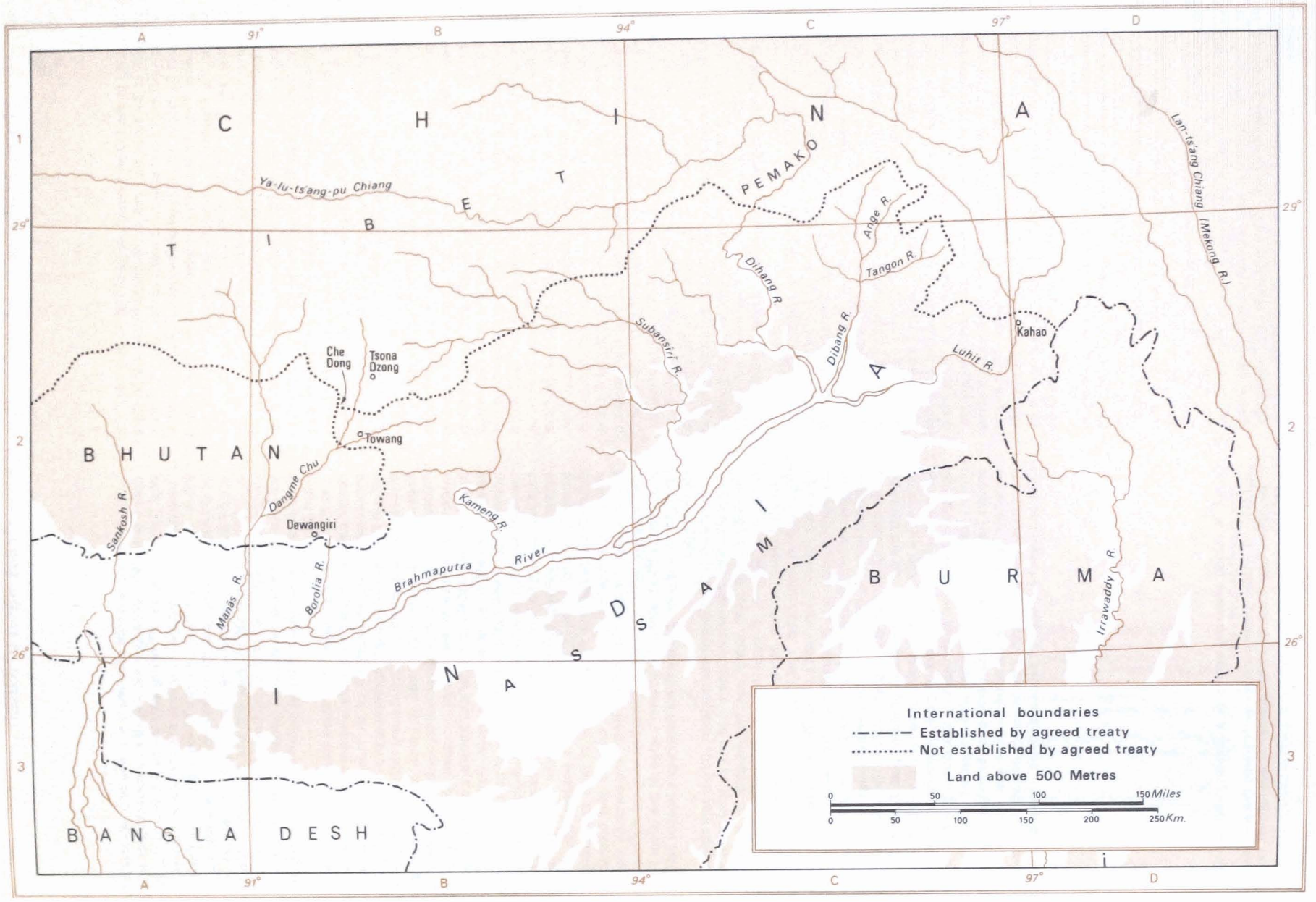
Almost immediately a problem arose when Tibetan troops occupied Lingtu which was 21 km (13 m) inside Sikkim. Britain did not want to raise the question of the Tibetan-Sikkim boundary with China; it was considered preferable to settle the matter with Sikkim. For a time there was no action against the Tibetan invaders, probably because the Maharajah of Sikkim explained they were punishing him because he had not taken a more active part in discouraging the Macaulay mission. He also admitted that the occupied territory was Tibetan and he only occupied it as an agent (Lamb (1960), 175–6). Unfortunately for Britain the Tibetan presence in northern Sikkim was disrupting trade and creating uncertainty amongst tea-planters. In March 1888 the Tibetans were driven out of the area by British forces which continued in hot pursuit into the Chumbi valley in September 1888. This was a tactical error because the Chumbi valley was unquestionably Tibetan territory and this incursion allowed China to raise the question of Sikkim's northern boundary. In fact British fears were groundless and a boundary was quickly settled along the northern watershed of the Tista river, from mount Gipmochi on the Bhutan border to the border of Nepal in the headwaters of the Mechi river.

An attempt was made to demarcate the boundary in 1895 but the Tibetan delegates did not appear and the Chinese declined to act without them. The British officer erected three pillars at passes but within one month all the pillars had been destroyed by Tibetans. The 1890 line was confirmed in 1904 and 1906 and it has survived, apparently unmarked, to the present. China has listed this as an unequal treaty, but it does continue the general alignment of the boundary between China and Nepal and there are no reports of territorial problems along this boundary. However, while it might be possible for an independent Sikkim to confirm the boundary yet again with China, it will probably be much harder for India acting on behalf of Sikkim.

The boundary between China and India, which stretches from Burma in the east to Bhutan in the west, is the subject of a major dispute between the two countries. China maintains that this boundary is not defined in any treaty and that the traditional division lies in the foothills of the Himalayas bordering the Brahmaputra river. India maintains with equal firmness that a boundary, lying in the high peaks of the Himalayas was defined in a convention initialled by British, Tibetan and Chinese representatives in April 1914, and an exchange of notes between Britain and Tibet in March of the same year. The boundary claimed by India is known as the McMahon Line. The documents on which India relies were the product of British strategy to set a limit to Chinese expansion into Assam and a limit to British responsibility in the Himalayas. From 1904 until 1911 Britain worked through diplomatic relations with China to ensure that there was no risk of Russia intervening in Tibetan affairs, while at the same time ensuring that Britain enjoyed some commercial benefits in that area. This aim involved bolstering China's ascendancy in Tibet and this policy began to create problems after 1908 when China began to extend its influence south towards Assam. By the time that British authorities began to react to this situation the onset of the Chinese revolution reduced Chinese pressure in Assam. Despite this development British authorities began to work towards a definite boundary through the Himalayas.

A tripartite conference was arranged in October 1913, ostensibly to improve relations between China and Tibet. Sir Henry McMahon had been impressed by the Russian solution to the Sino-Mongolian question earlier in 1913 and suggested a division of Tibet into inner and outer zones. While Chinese suzerainty over the whole of Tibet was recognized in the April convention, it was recorded that China recognized the autonomy of outer Tibet. The boundary between these two areas was marked on a map at a scale of 1:3 800 000, which also recorded the boundary of Tibet, including a section from Burma to Bhutan. It is generally assumed that this is the same boundary defined on a map at a scale of 1:500 000 which accompanied the secret exchange of notes between Britain and Tibet, which was signed a month earlier. Even if China accepted the convention map as a starting point, and there is no reason why it should, the boundary would be hard to identify. The scale of the map is too small and the map itself is too inaccurate to allow certain translation to modern maps or to the landscape. This point can be illustrated by noting that the red line of the map represents a border 6 km (4 m) wide! This boundary will only be settled when both sides are prepared to negotiate without prior conditions.

Lamb, A. (1960). *Britain and Chinese central Asia*. London.
——— (1966). *The McMahon Line*. 2 vols., London.


A
91°
B
94°
C
97°
D
1
2
3
29°
26°
C H I N A
T I B E T
PEMAKO
Ya-lu-ts'ang-pu Chiang
Lan-ts'ang Chiang (Mekong R.)
Ange R.
Dihang R.
Tangon R.
Subansiri R.
Dibang R.
Luhit R.
Kahao
Che Dong
Tsona Dzong
Towang
B H U T A N
Dangme Chu
Sankosh R.
Dewangiri
Kameng R.
Brahmaputra River
Manas R.
Borolia R.
A S S A M
B U R M A
Irrawaddy R.
I N D I A
B A N G L A D E S H
International boundaries
Established by agreed treaty
Not established by agreed treaty
Land above 500 Metres
0 50 100 150 Miles
0 50 100 150 200 250 Km.

19 The India-Pakistan boundary through the Great Rann of Kutch

According to the Indian Independence Act of 18 July 1947, the province of Sind was awarded to Pakistan. South of Sind there were a number of suzerainties, including Kutch, Sulgam, Tharad, Wav and Santalpur, and they all subsequently acceded to India. This meant that the boundary between Sind and Kutch then became the international boundary, but it was soon evident that the Indian and Pakistan authorities had different views about the location of that line through the Great Rann of Kutch.

The northern Great Rann has an area of about 19 700 sq. km (7600 sq. m), while the Little Rann measures 5200 sq. km (200 sq. m). They are separated by a ridge linking Bhuj and Radhanpur. The dispute was entirely concerned with the Great Rann, which is usually described as a salt marsh or a salt-impregnated alluvial tract. Such descriptions focus on the important saline characteristics of the surface soils of the Rann, but neglect the slight differences which are important to the economic and political geography of the area.

There is still some doubt about the exact chronology of geological events in the Great Rann, but the following points can be made safely. While the Great Rann may have been a marine bay at some time in the past that has not been the situation in recent geological times. However, whether this area was once a true marine bay or a shallow lagoon is less important than the fact that the area has now been filled by a combination of alluvial and aeolian deposits. The alluvial sediments are brought into the area by such rivers as the Luni flowing southwestwards from Rajasthan. Before 1819 they were also provided by the southern arm of the Indus which reached the sea through what is now Kori creek. In that year an earthquake raised the central part of the Great Rann forming Pacham and Khadir islands, and created a small escarpment 80 km (50 m) long and 5–6 m (18–20 ft) high, across the old bed of the Indus, forcing its diversion westwards. The wind-blown deposits are imported by the northwest winds, in winter, from the Thar desert. Some parts of the Rann near the coast may also receive sand laid down by the encroaching sea at the time of the southwest monsoon in summer. During winter there is very little surface water in the Great Rann, but during summer considerable areas are flooded to a depth of 0.6–1.5 m (2–5 ft).

In the alternating wet and dry seasons, slight differences in elevation are critical to the processes of soil formation. The highest and most prized soils are called bet. They consist of sandy formations supporting a cover of grasses and small shrubs, and owe their existence to the slight elevation which allows rainwater draining through them to prevent the accumulation of harmful salts. There are extensive areas of bet in the northern part of the Great Rann, where the term is used as a place name; Dhara Banni consists of an extensive area of bet soils. The lowest and least valuable areas are called rann. These soils consist of fine sand and clay heavily impregnated with salt and devoid of vegetation. There are intermediate soils known as lana which support some vegetation, although not as much as the bet areas. The bet and lana soils provide valuable grazing during winter, when they can be easily reached, and during summer if they are not cut off by floods. Access to these grazing areas was one of the prizes to be won in this dispute.

Before examining the course of the dispute it is necessary to outline the agreed facts about this boundary. The western terminus of the Kutch-Sind boundary is the mouth of the Sir creek, while the eastern terminus is the tri-junction of Gujarat, Rajasthan and Hyderabad. In 1914 the western part of this boundary was defined as following the Sir creek to latitude 23°58' north, then following the parallel eastwards for 35 km (22 m) to longitude 68°41' east. The land section of the boundary was demarcated by sixty-seven sandstone pillars in 1923–4. At the same time the boundary was extended northwards along meridian 68°41' east for 37 km (23 m) to latitude 27°17' north, and this extension was marked by sixty-six sandstone pillars.

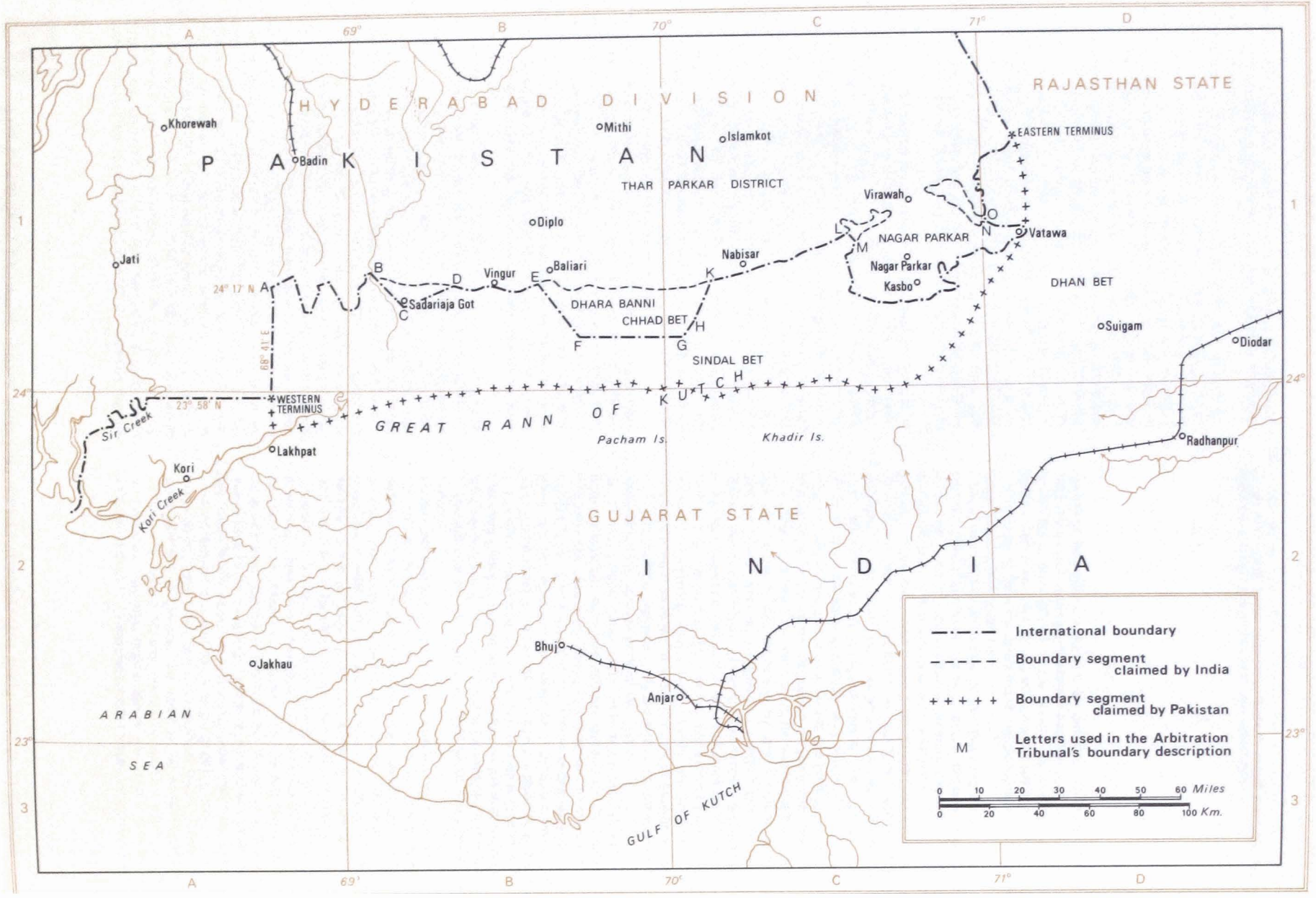
The Indian government asserted that it was only necessary to draw a boundary connecting the last pillar of the extension in the west (68°41' east, 24°17' north) with the tri-junction of Gujarat-Rajasthan and Hyderabad in the east, and that the best line would follow the northern limits of the Great Rann. The Pakistan government insisted that the northward extension was not an agreed boundary, and that it was necessary to connect the point at 23°58' north and 68°41' east with the tri-junction. The line sought by Pakistan proceeded south from the western terminus to the head of the Kori creek and then followed an eastward course, straddling the twenty-fourth parallel, before curving northwards to the tri-junction.

In the period April-June 1965 there was fighting along this border between regular army units, and the cease-fire contained provisions for the appointment of an independent tribunal to resolve the matter if bilateral agreement proved impossible. This tribunal was duly constituted in February 1966, and comprised a Yugoslav judge appointed by India, an Iranian judge appointed by Pakistan and a Swedish judge appointed by both countries. The evidence presented to the tribunal occupied 10 000 pages and included maps, official letters, edicts, travellers descriptions and acts of jurisdiction by both governments. Both sides had two powerful arguments. Indian authorities could point to the fact that the northward extension of the boundary along meridian 68°41' east was made by a joint Kutch-Sind survey team, and that many official maps showed the boundary between these two areas along the northern limit of the Great Rann. Pakistan was able to demonstrate firstly that the authorities in Sind had exercised virtually uninterrupted authority over criminal and commercial acts in certain parts of the northern Rann, and secondly that the map accompanying the 1914 demarcation showed the northern boundary of Kutch along the southern edge of the Great Rann. This map thus implied that the Great Rann was a frontier between the two states.

The award of the tribunal was made on 19 February 1968 and it was predictable that neither side would win its total claim. First, the evidence on both sides was too weighty to be entirely discounted; second, it must have been evident that it was politically desirable that there should be concessions to the arguments of both sides. The Yugoslav judge thought that the boundary should follow India's claim (Bebler, 1968), and initially the Iranian judge was persuaded by the Pakistan arguments. However, when the Iranian judge read the chairman's award he endorsed it, and so the views of the Swedish judge were accepted by a majority of one (Lagergren, 1968). The new boundary accepted the northern extension of the original Kutch-Sind line, which was a point in India's favour. However, the subsequent line eastwards enclosed two areas of the northern Rann at Sadarlaja Got and Dhara Banni in Pakistan, to the disappointment of the Indian authorities. The tribunal also simplified the boundary around Nagar Parkar in the extreme east, to remove the Indian salients which would have restricted Pakistan's access to the area to a narrow neck at Virawah. This boundary was accepted by both sides and there have been no serious disputes in the area since.

Bebler, A. (1968). Dissenting opinion of A. Bebler. *Indian Journal of International Law*, 8: 92–128.

Lagergren, G. (1968). Judicial decisions: The Indo-Pakistan Western Boundary Case Tribunal. *Indian Journal of International Law*, 8: 247–65.


HYDERABAD DIVISION
RAJASTHAN STATE
PAKISTAN
INDIA
GUJARAT STATE
THAR PARKAR DISTRICT
NAGAR PARKAR
DHAN BET
DHARA BANNI
CHHAD BET
SINDAL BET
GREAT RANN OF KUTCH
GULF OF KUTCH
ARABIAN SEA
Khorewah
Badin
Mithi
Islamkot
Diplo
Virawah
EASTERN TERMINUS
Vatawa
Jati
Nabisar
Nagar Parkar
Kasbo
Vingur
Baliari
Sadariaja Got
Suigam
Diodar
Radhanpur
WESTERN TERMINUS
Lakhpat
Kori
Kori Creek
Sir Creek
Pacham Is.
Khadir Is.
Bhuj
Anjar
Jakhau
24° 17' N
23° 58' N
68° 41' E
A
B
C
D
E
F
G
H
K
L
M
N
O
International boundary
Boundary segment claimed by India
Boundary segment claimed by Pakistan
Letters used in the Arbitration Tribunal's boundary description
0 10 20 30 40 50 60 Miles
0 20 40 60 80 100 Km.

20 The boundary between India and Pakistan through the Bari and Bist Doabs

This section of the India-Pakistan boundary measures 388 km (210 m) from the Sutlej river, near the headwaters of the Dipalpur and Bikaner canals, to the middle valley of the Ujh river. This boundary traverses and divides one of the renowned geographical regions of the subcontinent. The region finds its unity in the nature of the five rivers which flow out of the mountains and are finally gathered together into the Indus river south of Multan. The Chelum, Chenab, Ravi, Beas and Sutlej emerge from the Himalayan foothills, which here have an elevation of about 760 m (2500 ft), via braided channels which are caused by the deposition of alluvium consequent on the marked change in gradient. As the rivers debouch from the mountains their gradient changes from about 3 m per km to about 0.2 m per km (15 ft per m to 1 ft per m). Across this very flat plain, which is composed of immense thicknesses of alluvium, the rivers are slightly entrenched into wide valleys flanked by low, steep bluffs. The rivers meander widely across the flood plain which is subject to inundation in late spring and summer. Settlements tend to be located on the bluffs or minor meander terraces in the flood plain. Each interfluve is called a Doab. The Bari Doab, lying between the Ravi and Sutlej-Beas rivers, and the Bist Doab, which separates the Beas and Sutlej rivers, form the core of the region divided by the boundary.

The task of drawing a boundary through this region was given to a tribunal headed by Lord Radcliffe in 1947 and the tribunal started work only twenty-four days before India and Pakistan were to become independent. This fact is of some importance because Lord Radcliffe was also concerned with the tribunal created to partition Bengal, and so this period of boundary construction was incredibly rushed. Since the social, economic and political geography of the Punjab was very complicated it was inevitable that the resulting boundary would have defects.

The Indian Independence Act of 18 July 1947 made arrangements for the permanent division of the Punjab and made a notional separation between India and Pakistan. India was awarded all the districts in the divisions of Jullundur and Ambala and the Amritsar district of Lahore division. Pakistan secured all the districts in the divisions of Multan and Rawalpindi and the districts of Gujranwala, Gurdaspur, Lahore, Shekhupura and Sialkot in the division of Lahore (Poplai, 1:40). The tribunal was instructed to 'demarcate the boundary of the two parts of the Punjab on the basis of ascertaining the contiguous areas of Muslim and non-Muslim. In doing so it will also take into account other factors' (Poplai, 1:66). When the judgement was handed down on 12 August 1947, two days before India and Pakistan became independent, it was apparent that the tribunal had been influenced to a remarkable degree by the existing administrative boundaries.

Two main parties gave evidence before the tribunal. The Muslim League represented Pakistan's interests, while Congress Party and Sikh representatives presented the Indian case. The Indian case rested on the allocation of large administrative units where one or the other religion was in a majority, and on consideration of economic and strategic issues. In contrast Pakistan preferred a line drawn to divide the smallest administrative units, called tahsils, without any reference to other matters. The disputed area comprised the Rechna Doab, between the Chenab and Ravi rivers and the Bari and Bist Doabs, as well as some riverine areas on the south bank of the Sutlej river. Predictably, Lord Radcliffe's award was a compromise between the two extreme lines claimed, and he identified the main area of dispute as the Bari Doab. His pragmatic boundary excluded seven and a half tahsils with Muslim majorities from West Pakistan, and it is necessary to attempt an explanation of these exclusions to understand the location of this section of the India-Pakistan boundary.

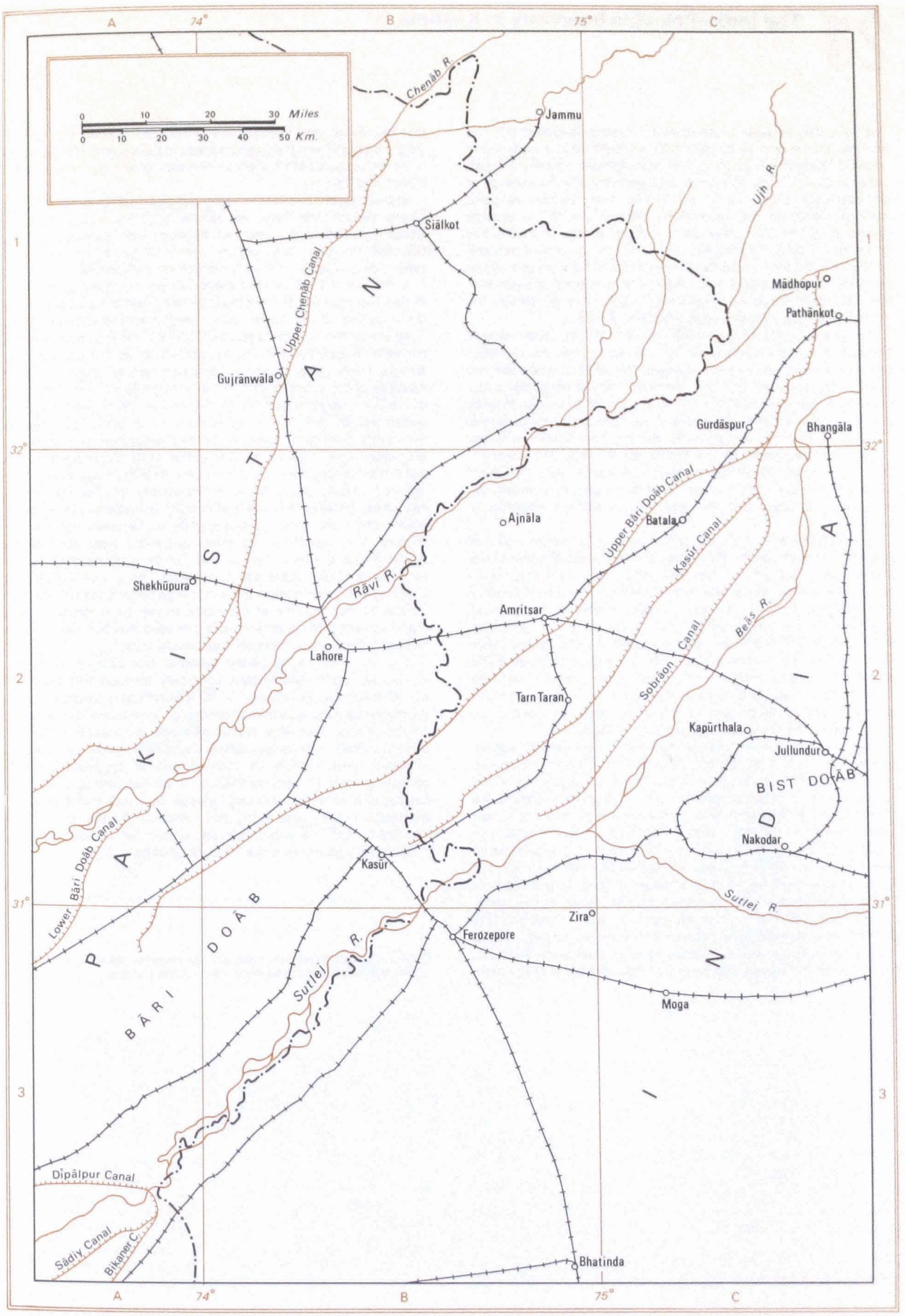
The four tahsils of Ferozepore, Zira, Nakodar and Jullundur straddle the Sutlej river, and the key to their exclusion from Pakistan is probably found in the significance of Ferozepore. It is an important transport centre and at that time it was a major cantonment with a small majority of non-Muslims. If this town had been awarded to Pakistan rail traffic in the surrounding Indian areas would have been severely disrupted and Pakistan would have possessed a salient south of the Sutlej. Finally, if Pakistan had secured the whole tahsil it would have controlled the head works from which the Bikaner Canal is fed, and this canal serves an Indian area. Clearly in this case the questions of the urban population, the integrity of railway systems and Indian defence proved decisive, and outweighed the problem of including a Muslim rural population in India. Once the question of Ferozepore was decided it is easier to justify the cession of the other three Muslim tahsils to India. First, they were all connected by an important railway; second, if they were given to Pakistan, Amritsar and the state of Kapurthala would have been made an effective enclave in Pakistan; third, any boundary leaving these areas in Pakistan while excluding Ferozepore would have been extremely convoluted; and fourth, the Muslim majority in Jullundur was very small.

Turning now to the partition of Kasur tahsil which lies on the west bank of the Sutlej river opposite Ferozepore, it is apparent that Lord Radcliffe wished to avoid splitting the area irrigated by the Sobraon canal and the Kasur Branch Lower Escape (Poplai, 1:68). There seem to be two reasons why the tahsil of Ajnala was given to India rather than Pakistan, as its Muslim majority would suggest. First, it was probably considered undesirable to run the boundary too close to the western limits of the city of Amritsar for both strategic and economic reasons. Second, the Lahore branch of the Upper Bari Doab canal passes through Ajnala before entering the non-Muslim tahsil of Tarn Taran.

At first glance it may seem that the Muslim tahsils of Gurdaspur and Batala were awarded to India in order to provide access to Jammu and Kashmir. Michel (192–3) explores this concept and rejects it. At the time of the award it was expected that Kashmir would join Pakistan, and in any case the route via Madhopur to Jammu was not safe from Pakistan interruption if that country so wished. These facts do not discount the fact that the cession became increasingly valuable as the Kashmir situation developed. It appears that Lord Radcliffe decided to give the non-Muslim tahsil of Pathankot, containing the Madhopur head works, to India, and he decided to tack on the two Muslim tahsils to the south to avoid isolating Pathankot, and to keep the Upper Bari Doab canal intact as far as Lahore. Michel (188–91) exposes the weakness of this reasoning. The Gurdaspur region relies mainly on rainwater and well-irrigation, so only 7 per cent of the area irrigated by the canal was in this area. Of the remainder, 32 per cent of the land irrigated by this canal was found in Amritsar and 61 per cent was located in Lahore. Whether it is argued that the country making the greatest use of, or the country least likely to interfere with the canal should control the head works, Pakistan has a stronger case than India.

A number of disputes arose along this boundary but none was serious and they were all solved. Perhaps the most significant development contributing to the stability of this boundary has been the signing of the Indus Waters treaty in 1960 which governs the use of the waters of the five rivers between India and Pakistan.

Michel, A. A. (1967). *The Indus Rivers*, New Haven, Conn.
Poplai, S. L. (1959). *Select documents on Asian Affairs, India 1947–50*. 2 vols, Oxford.


A
74°
B
75°
C
0 10 20 30 Miles
0 10 20 30 40 50 Km.
Chenāb R.
Jammu
Ujh R.
Siālkot
Upper Chenāb Canal
Mādhopur
Pathānkot
Gujrānwāla
Gurdāspur
Bhangāla
32°
Upper Bāri Doāb Canal
Ajnāla
Batala
Kasūr Canal
Shekhūpura
Rāvi R.
Amritsar
Beās R.
Lahore
Sobrāon Canal
Tarn Taran
Kapūrthala
Jullundur
BIST DOĀB
Nakodar
Lower Bāri Doāb Canal
Kasūr
Sutlej R.
31°
Zira
Ferozepore
Moga
BĀRI DOĀB
Sutlej R.
Dipālpur Canal
Sādiy Canal
Bikaner C.
Bhatinda
PAKISTAN
INDIA
1
2
3

21 The India-Pakistan boundary in Kashmir

The boundary between those parts of Kashmir controlled by India and Pakistan stretches for about 740 km (450 m) in a rectangular pattern. There is a mainly north-south segment from the Chenab valley to Lunda in the Kishanganga valley; the line then swings to an east-west alignment to the Indus river, before swinging northeastwards to the Karakoram pass, which is the eastern terminus of the Sino-Pakistan boundary. Spate (366–93) has provided a useful, detailed account on the geography of Kashmir at the time the first cease-fire line was drawn through this region in 1949. He describes the succession of latitudinal zones which the boundary traverses from the Siwalik hills bordering the Punjab to the Karakoram range bordering Sinkiang.

The Siwalik hills have summits about 1200 m (4000 ft) and generally form an infertile zone. The thin soils, often derived from limestones, have been severely eroded into ravines, and there are only a few favoured locations. Generally the water-table is too deep for irrigation and there is also the risk of flash-floods from the numerous transverse gullies. This zone extends from the Chenab valley northwestwards to Punch. The Siwalik hills are succeeded northwards by the Pir Panjal, a range with peaks to 4600 m (15 000 ft) which merges westwards with the main Himalayan range. The valleys in this range carry moderate population densities but the region is 'essentially negative, a barrier'.

In the latitudinal regional sequence the enclosed vale of Kashmir lies north of the Pir Panjal, but the cease-fire line skirts the western margin of the vale and this most important agricultural region falls almost entirely within India. The boundary traverses the major Himalayan range following the general alignment of the Kishanganga river. This range has peaks at about 6000 m (19 500 ft) and this is another barrier region. After Kazalwan on the Kishanganga river the forest ends and the boundary crosses mainly rocky, icy wastes which become progressively more forbidding in the Karakoram range north of the Indus river. Indeed, beyond Thang the boundary description simply notes 'Thence eastwards joining the Glaciers'.

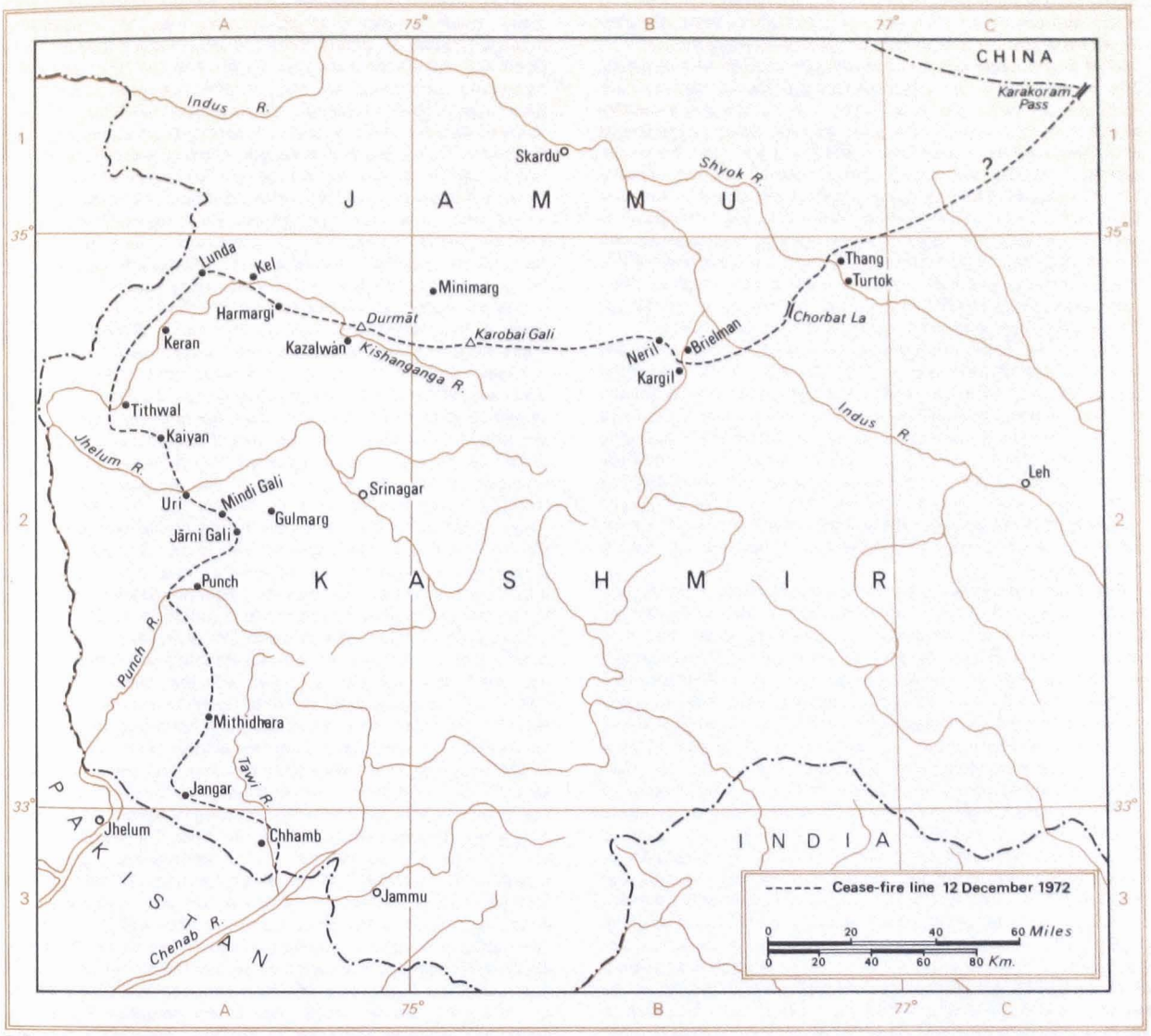
Countless words have been written about the Kashmir dispute between India and Pakistan but the evolution of the boundary can be briefly described. Readers interested in full accounts of the historical and political background to the dispute may consult the books by Gupta and Lamb. When Britain withdrew from the Indian subcontinent the territory was partitioned between India and Pakistan by the Radcliffe awards. The rulers of princely states were allowed to decide for union with either India or Pakistan, and on 26 October 1947 the Hindu maharajah of Jammu and Kashmir signed an instrument of accession to the Indian Union, even though nearly 80 per cent of his subjects were Muslims. This decision was resisted by tribesmen who invaded Kashmir along the Jhelum valley; it was supported by the Indian army. Pakistan forces became involved and by the middle of 1948 a fairly static line had developed between the two armies. Pakistan controlled Gilgit, Baltistan and the western areas of Punch and Jammu, while India occupied Ladakh, the vale of Kashmir and the remainder of Punch and Jammu.

The cease-fire line was formally defined on 27 July 1949. South of the Jhelum river there was reference to 'the factual positions about which there is agreement between both parties'. North of the river the boundary was defined in some detail, usually by reference to hills which clearly were strategic features.

In the second half of 1965 there was general fighting along the Indian-Pakistan border, but the joint talks held in Tashkent, under the auspices of the Soviet Union confirmed the location of the 1949 cease-fire line. In December 1971 the third round of fighting began in association with the actions which led to the creation of Bangla Desh. After a short campaign, presumably restricted because of the extreme cold in the northern part of the border, a cease-fire was arranged on 17 December 1971. This front was confirmed by the Simla agreement of 3 July 1972 as the temporary boundary between the two countries, and its actual alignment was fixed on 12 December 1972. Working from the published descriptions and without the detailed maps which have not been made available, it is impossible to describe all the deviations between the 1949 and 1972 boundaries. However, it seems likely that India gained slightly in the areas north of the Jhelum. The specific areas seem to be the west bank of the Kishanganga between Tithwal and Lunda, and the zone on the north bank of the Indus which contains Thang and Turtok. The description does not allow the exact alignment of the boundary to be plotted but the line of control is shown on nineteen mosaic maps covering the entire border between the two countries in Kashmir; these maps have not been made public.

It is too soon to be certain whether this cease-fire line will remain as the India-Pakistan boundary through this region. It would obviously be exceptional for a satisfactory boundary to be produced by freezing areas of control on a particular day of a war. The boundary, even when traced on maps at a scale of 1:250 000, clearly divides river valleys which could reasonably be expected to have some identity of interest and which were certainly important lines of communication. If cordial relations are ever established between India and Pakistan they may find it helpful to exchange equal areas along their Kashmir border so that the boundary can be administered efficiently without causing unnecessary hardship to the inhabitants of both sides.

Gupta, S. (1966). *Kashmir: a study in India-Pakistan relations*. Bombay.
Lamb, A. (1966). *Crisis in Kashmir, 1947–1966*. London.


A
75°
B
77°
C
CHINA
Karakoram Pass
Indus R.
Skardu
Shyok R.
J A M M U
Lunda
Kel
Minimarg
Thang
Turtok
Harmargi
Durmāt
Karobai Gali
Chorbat La
Keran
Kazalwan
Kishanganga R.
Neril
Brieldan
Kargil
Tithwal
Kaiyan
Indus R.
Jhelum R.
Leh
Srinagar
Uri
Mindi Gali
Gulmarg
Jārni Gali
K A S H M I R
Punch
Punch R.
Mithidhara
Tawi R.
Jangar
P A K I S T A N
Jhelum
Chhamb
I N D I A
Jammu
Chenab R.
Cease-fire line 12 December 1972
0 20 40 60 Miles
0 20 40 60 80 Km.

22 The boundary between India and Bangla Desh

When Bangla Desh was created in 1971 it inherited the boundary which had been drawn between India and East Pakistan twenty-six years earlier. This boundary meanders for 4053 km (2519 m) across a landscape which consists mainly of level alluvial plains. The comparatively short section through the Chittagong hills, leading to the tri-junction with Burma, provides the only exception to this lowland boundary. The plain was laid down by the Ganga and Brahmaputra rivers which emerge from the Himalayas, especially during the spring and monsoon seasons, heavily charged with silt. Much of this sediment is deposited on the river banks and this perennial renewal contributes to soil fertility. The main rivers reach the sea through a maze of distributaries and few areas of Bangla Desh are more than 16 km (10 m) from some river. In the southern part of Khulna, around the Raimangal river, there are marshy conditions because the mouths of the Ganga have moved eastwards and this area is not regularly flushed.

This alluvial plain was densely populated in 1947 when the boundary was drawn, and it was the task of the appointed commissioners to draw a line separating the main areas of Muslim and non-Muslim communities. The commission was led by Lord Radcliffe, who was also chairman of the commission acting to divide the Bengal province, and included two members representing each side. Evidence was taken from the Congress Party representing India's interests, and the Muslim League representing Pakistan's interests. These two organizations each put forward the boundary considered to be ideal, and they did not touch at any point.

The Indian delegates believed that partitition was unnecessary, but if it was to occur then it should be done in such a way that the smallest possible area was excised from India. They sought to define the Muslim-majority area by reference to thanas, which were the smallest administrative units for which statistics were available. The Muslim delegates argued that the religious majorities should be calculated in the largest administrative units, which were called districts. This principle alone defined a larger area than an area based on majorities in the thanas. However, these delegates also argued that the commission had a duty to define a boundary which ensured that the new state had a reasonably strong economy. The Muslim League claimed all Bengal apart from the six districts west of the meridian of Calcutta: Birbhum, Bankura, Burdwan, Hooghly, Howrah and Midnapore. They also claimed the whole of Sylhet, which decided on 13 July 1947 to join Pakistan, and the districts of Goalpara, Garo hills, Cachar, and Mizo hills, as well as the southern part of the district of Khasi and Jaintia hills. This territorial arrangement would have included all the areas of Muslim majorities; access to the port of Calcutta and a share in its industries; and areas of Assam where low population densities would allow migration from the crowded delta. The princely states of Cooch Behar and Tripura would have been enclaves within East Pakistan and therefore subject to pressure. Further, India would lack direct connection between its main territory and areas of Assam in the middle Brahmaputra valley.

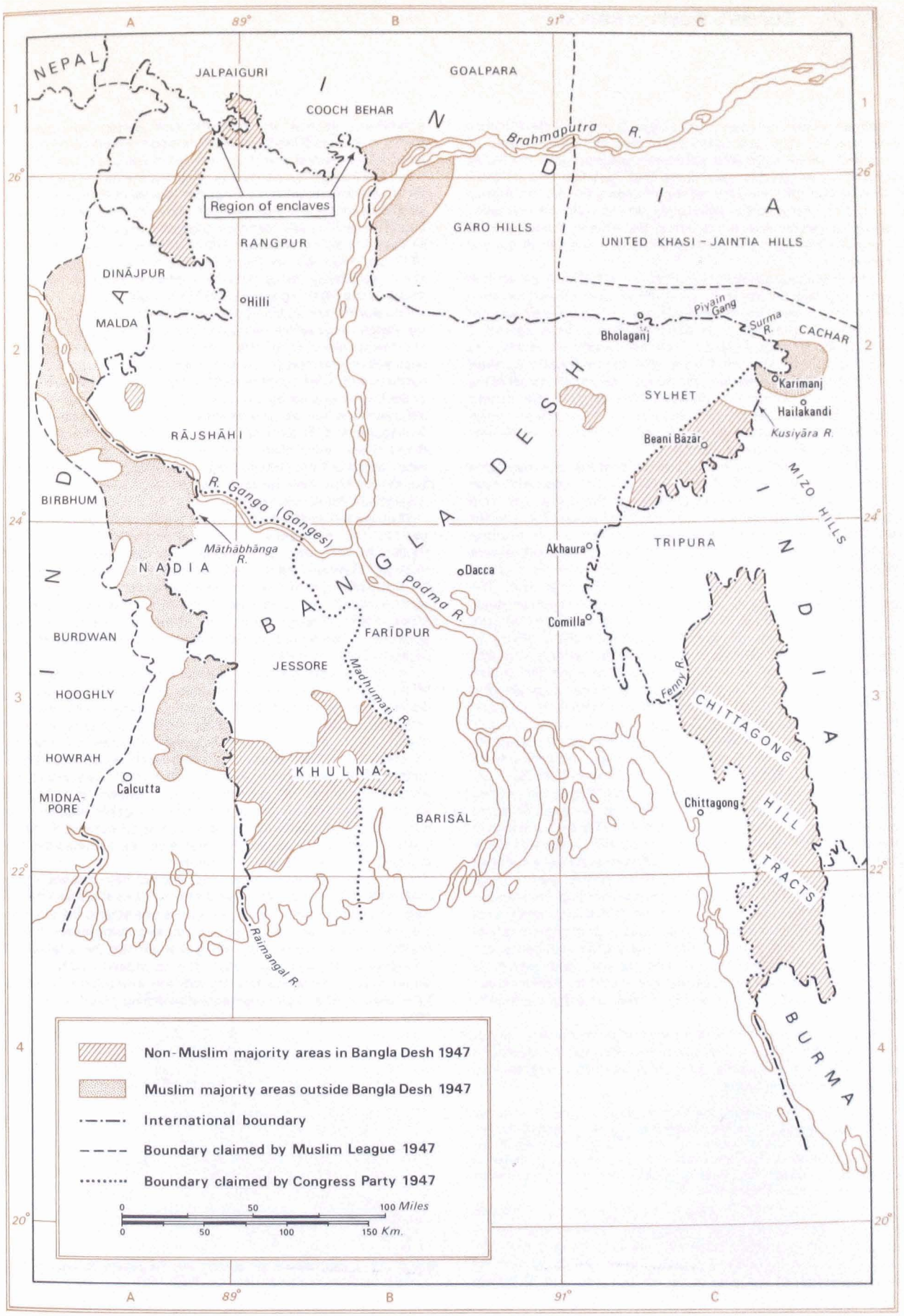
The boundary recommended by the Congress Party lay entirely within the Muslim League's boundary and the zone between the two lines varied from 32 km to 200 km in width (20 m to 125 m). This boundary left only three small areas with Hindu majorities in East Pakistan. South and west of the Ganga only Faridpur and Barisal were left to Pakistan, while north of the river India gained the Bengal districts of Dinajpur, Malda, Jalpaiguri and Darjeeling together with the western part of Rangpur district. The six southern thanas of Sylhet were also claimed. This boundary would have left some Muslim-majority areas outside Pakistan, would have ensured a safe connection between Bihar and upper Assam, and would have kept to a minimum the amount of manufacturing industry awarded to Pakistan.

Because the other members of the commission were equally divided in their views Lord Radcliffe had to make the final decision. Predictably Radcliffe's award made concessions to both sides, which had plainly asked for more than they expected to receive. The final boundary coincided with 1302 km (809 m) of the Congress Party's boundary and with 116 km (72 m) of the boundary proposed by the Muslim League. The chief disappointments for Pakistan must have been the failure to gain a share of Calcutta and any land in Assam suitable for colonization; the loss of Darjeeling and Jalpaiguri districts which gave India a narrow corridor to Assam; and the fact that neither of the princely states were left as enclaves within Pakistan. The features of the award which must have disappointed the Congress Party include the loss of the non-Muslim concentrations in Jessore, Khulna, Rangpur and southern Sylhet and the Chittagong hill tract; and the narrowness of the land corridor leading to Assam.

The boundary was mainly defined by reference to the existing limits of the thanas and districts making up Bengal province. There were only three sections where the boundary did not follow a former limit. First, the Mathabhanga river, which the new boundary followed after leaving the Ganga, had not previously served as an administrative boundary. Second, the boundary was deflected from existing lines near Hilli to avoid severing a railway. Third, the Kushyara river in southern Sylhet was substituted for previous administrative lines. It is not surprising that Lord Radcliffe used existing lines in view of the short time at his disposal, but problems arose from the use of this expedient. First, some thana boundaries were not well known and left room for disagreement. Second, by stipulating that the international boundary should follow the administrative boundaries and not the rivers with which they happened to coincide in 1947, a difficult situation was created. The rivers in this area often change their course, either gradually or suddenly. Radcliffe's stipulation meant that the boundaries did not move with the rivers, and that at different times sections of the river could lie entirely within one state or the other. Riverlands are very important in the delta, because as the water level falls new alluvial areas are exposed, and these areas, which are known as *chars*, are keenly sought for arable land. Third, the use of existing administrative boundaries preserved, as political fossils, the amazing pattern of enclaves on both sides of the boundary with Cooch Behar. These enclaves can be traced to the period 1661–1712 when wars were fought between Cooch Behar and the Mughal empire. These territorial oddities were preserved during British rule and were passed on intact to India and Pakistan. Banerji (1969) had provided an interesting description of these features. There were 121 Indian enclaves in Pakistan measuring 67 sq. km (26 sq. m), and they in turn contained twenty-one Pakistan enclaves measuring 23 sq. km (9 sq. m). On the Indian side of the boundary there were ninety-two enclaves belonging to Pakistan, measuring about 44 sq. km (17 sq. m) and they contained three Indian enclaves measuring 17 hectares (42 acres).

It was not surprising, given the basic hostility between India and Pakistan, that there was periodic friction along this border. It seemed that when India played a major role in helping Bangla Desh to gain its independence that boundary questions would disappear or be amicably resolved. There was no reported friction during the period 1971–5, but recently difficulties have arisen over India's decision to increase its use of the Ganga's waters before they reach Bangla Desh. This latter country is concerned that its interests will be adversely affected.

Banerji, R. N. (1969). Indo-Pakistan enclaves. *India Quarterly*, 25:254–7.


A
89°
B
91°
C
NEPAL
JALPAIGURI
COOCH BEHAR
GOALPARA
INDIA
Brahmaputra R.
Region of enclaves
GARO HILLS
UNITED KHASI - JAINTIA HILLS
RANGPUR
DINĀJPUR
Hilli
MALDA
Piyain Gang
Surma R.
Bholaganj
CACHAR
Karimanj
SYLHET
Hailakandi
Kusiyāra R.
Beani Bāzār
RĀJSHĀHI
BANGLADESH
MIZO HILLS
BIRBHUM
R. Ganga (Ganges)
Māthābhānga R.
Akhaura
TRIPURA
NADIA
Dacca
Padma R.
Comilla
BURDWAN
FARĪDPUR
JESSORE
Madhumati R.
Fenny R.
CHITTAGONG HILL TRACTS
HOOGHLY
HOWRAH
KHULNA
Calcutta
MIDNA-PORE
BARISĀL
Chittagong
Raimangal R.
BURMA
Non-Muslim majority areas in Bangla Desh 1947
Muslim majority areas outside Bangla Desh 1947
International boundary
Boundary claimed by Muslim League 1947
Boundary claimed by Congress Party 1947
0 50 100 Miles
0 50 100 150 Km.
1
2
3
4
26°
24°
22°
20°

23 Burma's western boundary

Burma's western boundary with Bangla Desh and India stretches for 1609 km (1000 m) from the Bay of Bengal to the Himalayas. Its terminus in the mountains will remain unknown until the Indian and Chinese governments settle their boundary in northern Assam. For 1287 km (800 m) the boundary follows the Arakan ranges to a point east of Chittagong. At this point the mountains swing eastwards and peter out in the Arakan Yoma, west of Rangoon; the boundary continues nearly due south to the Naf estuary.

The Arakan ranges vary from 4880 m (16 000 ft) in the north to about half that altitude in the south. They stand athwart the main summer monsoon and receive copious rainfall on their western slopes and summits. The resulting rivers have carved a rectangular drainage pattern in the folded limestones, sandstones and shales, with long north-south courses connected by short east-west gorges cut through the ridges. The tropical forest of the hills contrasts with the more open grasslands of the eastern plains. Around Lake Logtak there is an intermontane basin floored by thick alluvial deposits which provides some of the best rice-growing soils in the borderland.

During the eighteenth and nineteenth centuries the mountains harboured many small, fierce tribes, who preserved their independence against the larger states on the plains, and from time to time raided those areas for food and slaves. These tribes were found throughout the borderland except in the Manipur basin around Logtak lake. North of Manipur the main tribes were Khamptis, Singphos, and Nagas, while to the south the Suti and Lushai dominated east and west of the Manipur river. The southern ranges and the coastline were occupied by Arakanese. The activities of these hill tribes created problems for the Burmese kingdom to the east and the East India Company in Assam and lower Bengal. Burma, when strong enough, conquered sections of the tribal lands, whereas the British company had a policy of establishing strong outposts and sending raids in retaliation for tribal attacks. It was in this situation that friction developed now and again between the British and Burmese authorities. Refugees from Arakan fled to Chittagong after unsuccessful rebellions in 1797 and 1811, and demands for their return by Burma were refused. In 1819 Manipur was occupied by Burma, consolidating their hold over eastern Assam which had been developing for the past decade. Burmese boldness eventually was resisted by the British and a war began in March 1824. The day after war was declared Cachar was taken under British protection and money and weapons were supplied to Manipur refugees who then proceeded to evict the Burmese from their state. This action was so successful that the Manipur forces did not halt until they had occupied the Kabaw valley, east of their traditional boundary. The war was ended by the treaty of Yandabo in February 1826. By this treaty British authority was recognized in Assam, Cachar and Jaintia, and Manipur's independence was asserted. Burma also ceded the Arakan areas to Britain and the boundary was vaguely defined along the Arakan ranges.

In 1834 the Burmese sought a rectification of the boundary in the area of the Kabaw valley, which was occupied by Manipur's forces. This was a valuable area which has been described by Bryce in the following terms:

> This Kubo valley is considered the richest portion of Upper Burma, the yield of rice being said to be one-hundredfold. It was once populous, but owing to the long wars of Burma and Manipur, and to the raids of the Khyens (hill people), it has now become in large part a jungle-covered wilderness. The chief towns, once large cities, now include within their walls only a few hovels (Bryce, 496).

The British authorities conceded the force of the Burmese argument and presumably welcomed the opportunity of establishing more cordial relations, because it was decided to return the valley. Grant and Pemberton were sent to arrange for the retrocession of this area to Burma and they, with Burmese agreement, defined the southern and eastern boundary of Manipur. The southern boundary followed the Nansawing river as far as its source and then the latitude of the source to the Manipur river. The eastern boundary was related to the foot of the western wall of the Kabaw valley as far as the villages of the Loohooppas, who were under the suzerainty of Manipur. This section of the boundary continued to produce problems because it divided the Khyens who did not respect it. British officers re-marked this line in 1881 and 1894, but by the latter date there was little urgency about accurately fixing this boundary because Britain had acquired the adjoining areas of Burma in 1886.

The Burma-Assam boundary was settled in 1837 as lying along the Patkai range which separates rivers draining east and west. The lowest elevation of this range is 2440 m (8000 ft) and it becomes increasingly prominent and sharply defined towards the northern end. The boundary south of Manipur through the country of the Lushai was not settled until 1895, after a long period when the tribesmen had posed a threat to the security of Manipur, the Chittagong and Tripura hill areas and Cachar. The Tyao and Boinu rivers, which flow from opposite ends of a longitudinal valley about 241 km (150 m) long, were selected as a convenient boundary. After their junction they break westwards through a ridge to join the Kaladan river.

Thus the Indian-Burmese boundary was fashioned over a long period. The boundaries of Chittagong and Manipur were traditional lines and their general location was established through indigenous wars before the period of British occupation. North of Manipur the two countries selected a line coinciding with the highest and narrowest ranges, where there were no major tribes. Finally, through the country of the Lushai British officers selected a convenient administrative boundary between two adjacent British colonies.

The intercolonial boundary became an international limit when India, Pakistan and Burma became independent in 1947–8. Burma has concluded firm boundary treaties with both its neighbours and the location of its western boundary is not in dispute. The chief problem between Pakistan and Burma concerned the Naf estuary, a tidal reach which sometimes changed its configuration in terms of alluvial islands and the navigable channel. A definite line was settled in 1964; the boundary was drawn along the main navigable channel and nationals of both countries were guaranteed access to it. Now that Bangla Desh has succeeded Pakistan it can be assumed that the current boundary will continue unaltered.

The border between India and Burma has created some problems for both sides because of the activities at certain times of Naga rebels who were able to shift from one side to the other as the need arose. Discussions between the two countries resulted in the boundary agreement of 1967 which defined the established boundary in considerable detail. The boundary mainly follows watersheds or rivers and streams, the only exception is provided by a serious of straight segments connecting pillars erected in 1894.

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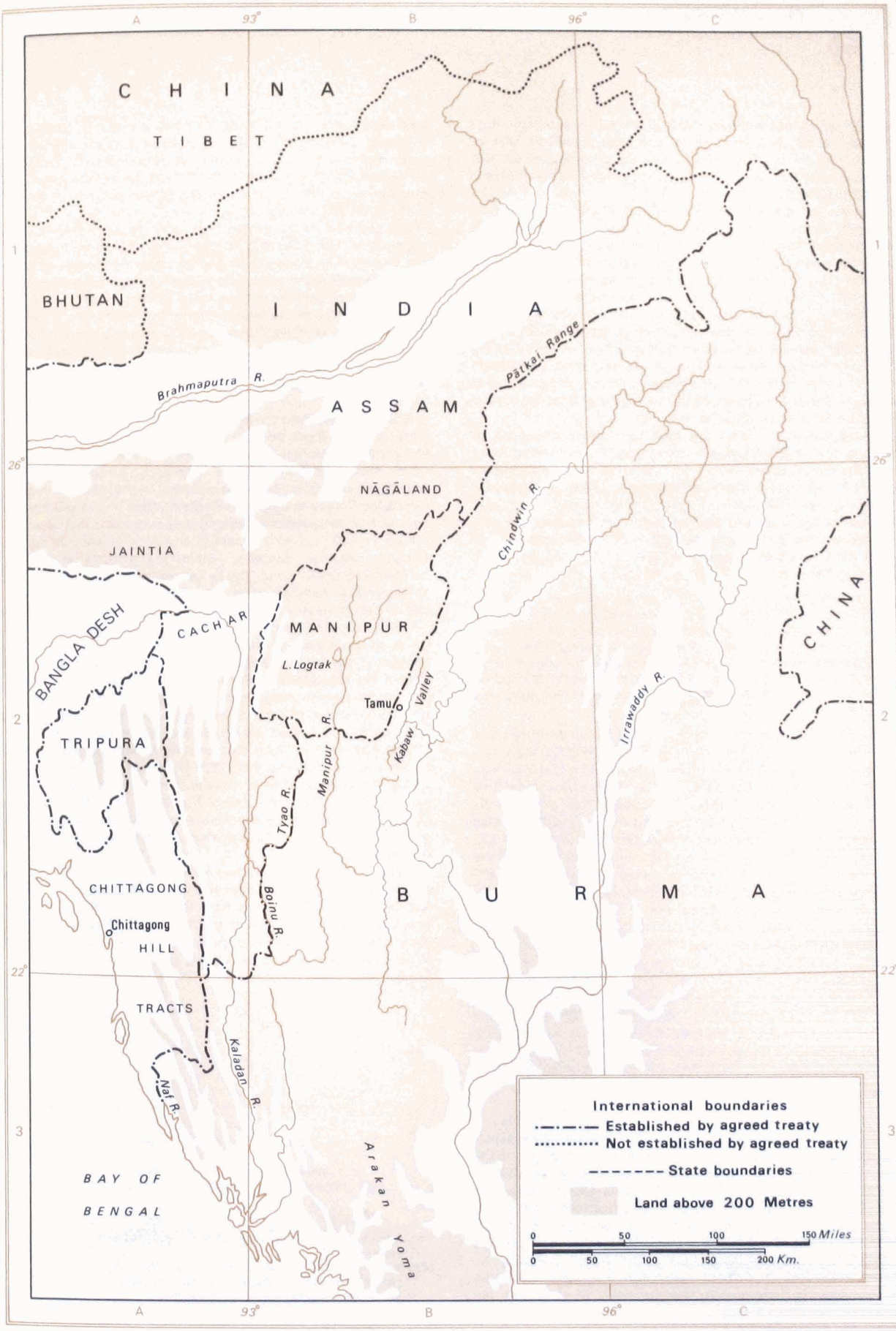
A
93°
B
96°
C
CHINA
TIBET
BHUTAN
INDIA
Brahmaputra R.
ASSAM
Pātkai Range
NĀGĀLAND
Chindwin R.
JAINTIA
BANGLA DESH
CACHAR
MANIPUR
L. Logtak
Tamu
Kabaw Valley
Irrawaddy R.
CHINA
TRIPURA
Manipur R.
Tyao R.
CHITTAGONG
Chittagong
HILL
TRACTS
Boinu R.
BURMA
Kaladan R.
Naf R.
Arakan Yoma
BAY OF
BENGAL
1
2
3
26°
22°
International boundaries
Established by agreed treaty
Not established by agreed treaty
State boundaries
Land above 200 Metres
0 50 100 150 Miles
0 50 100 150 200 Km.

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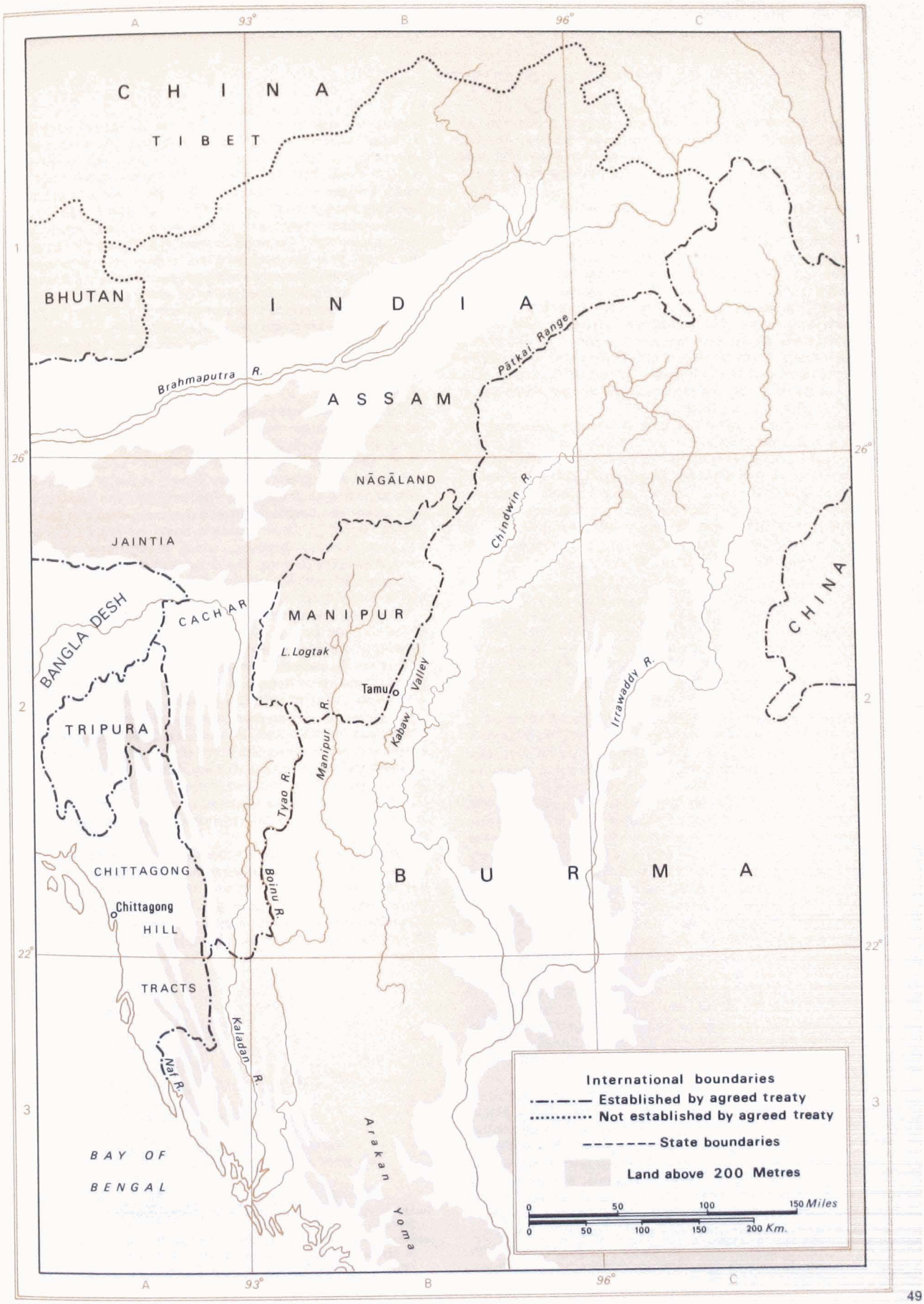

A
93°
B
96°
C
CHINA
TIBET
BHUTAN
INDIA
Brahmaputra R.
Pārkai Range
ASSAM
NĀGĀLAND
Chindwin R.
JAINTIA
BANGLA DESH
CACHAR
MANIPUR
L. Logtak
Tamu
Kabaw Valley
Irrawaddy R.
CHINA
TRIPURA
Manipur R.
Tiyao R.
BURMA
CHITTAGONG
Chittagong
HILL
TRACTS
Boinu R.
Kaladan R.
Nal R.
Arakan Yoma
BAY OF
BENGAL
26°
22°
1
2
3
International boundaries
Established by agreed treaty
Not established by agreed treaty
State boundaries
Land above 200 Metres
0 50 100 150 Miles
0 50 100 150 200 Km.

24 The early development of the Sino-Burmese boundary

The Sino-Burmese boundary was defined in a protocol on 13 October 1961. With only two exceptions, involving 342 sq. km (132 sq. m), the present boundary follows the boundary which was established by Britain and China in various treaties concluded in 1894, 1897 and 1941.

Two distinct sections of the boundary can be distinguished, lying north and south of the high conical peak, a feature which is mentioned in the 1894 treaty and the 1961 protocol. North of this peak there was no Sino-British agreement on the location of the boundary. Southwards to the Mekong the boundary was defined by three Sino-British treaties and demarcated. The peak, identified in 1961 as Mu-Lang Pum or Manang Pum, was originally designated by its co-ordinates. It appears likely that in 1894 it was selected as the most northerly peak recorded on the watershed between the Nmai Hka and Ta-ying Chiang on Elliott's map of 1890 (Walker, 205). It certainly lay north of Britain's area of control at the time, because Myitkyina was only established as a new administrative headquarters in 1895.

Britain sought to round out their Burmese possessions by claiming the whole Irrawaddy basin, which would also make Burma and India coterminous. The basin north of Bhamo had not attracted the Burmese rulers and Mogaung, 48 km (30 m) west of Myitkyina, was used as a frontier penal colony. China was reluctant to agree on any boundary through this area, and the explanation may be found in the facts that Chinese traders were active there and the extension of Chinese influence was more likely than the extension of British authority.

> Much of this opposition can be traced to Chinese influence; all along the frontier, from here down to Bhamo, the Chinese traders have acquired a preponderating influence, and they strongly object to any attempts to gain information about the country . . . The constant intertribal feuds among the Kachins render the task of the Chinese a comparatively easy one; whichever side is espoused by the Chinese must win the day and be afterwards dependent on their goodwill for its retention of the supremacy (Walker, 167–8).

It has been suggested that the Chinese resisted Britain's claim to the Irrawaddy basin because it was feared that the river may extend into Chinese territory (Tinker, 335). It is true that there was still some debate in British geographical circles about the source of the Irrawaddy, but it must be doubted that this was an important factor. Elliott (Walker, 172) had correctly explained that the greater flow of the Irrawaddy compared with the Salween was because the former river had a much larger catchment in the humid areas south of the main east-west watershed. In a very accurate prophesy Elliott predicted that explorers would not have to look north of latitude 28°30' north for the source of the Irrawaddy. The most northerly point on the Sino-Burmese boundary which follows the Irrawaddy watershed is exactly at that latitude. If British views of the Irrawaddy's source were so accurate it is hard to believe that the Chinese, who had access to much more information on the area, would be in serious doubt about the region's hydrography. The British tried fitfully to settle a final boundary but did not succeed. It may be that they were not very worried about the possible extension of China's influence into the upper Irrawaddy because the *de facto* boundary followed the grain of the country along a major watershed between the Irrawaddy and Salween systems.

South of the high conical peak the boundary divided a borderland which contained many traps for boundary-makers. First, the high, steep ridges, typical of the northern section and the Himalayas in general continued for only another 142 km (88 m). They became progressively lower as they approached the Ta-ying Chiang, and were succeeded between that river and the Mekong by the low Yunnan plateau, which had been carved into a confusing pattern of isolated plateaus and low ridges, separated by the broad valleys of rivers such as the Shweli, Nan-ting Ho, Nam Hka and Nam Lol. These valleys which are often less than 600 m (1967 ft), above sea level, provide opportunities for intensive settled farming, and migrations along north-south avenues. Distinct ethnic groups following these routes had intermingled in a complex pattern. Such a situation made it easier for Chinese and British interests to clash, and at the same time made it harder to disentangle the indigenous patterns of political authority and loyalties.

The first boundary drawn in 1894 reflected the problems of the negotiators. Along the ridge between the high conical peak and the Shweli river the boundary was closely defined in terms of rivers, streams, watersheds and villages. Between the Shweli and Salween rivers only the general trend of the line was defined, as well as its approximate intersection with the Salween. From the Salween to the Mekong, nearly twice the distance of the boundary west of the Salween, the boundary was defined in terms of the political boundaries of indigenous political units, such as Munglem and Kiang Tong, which were stated to be well-known locally.

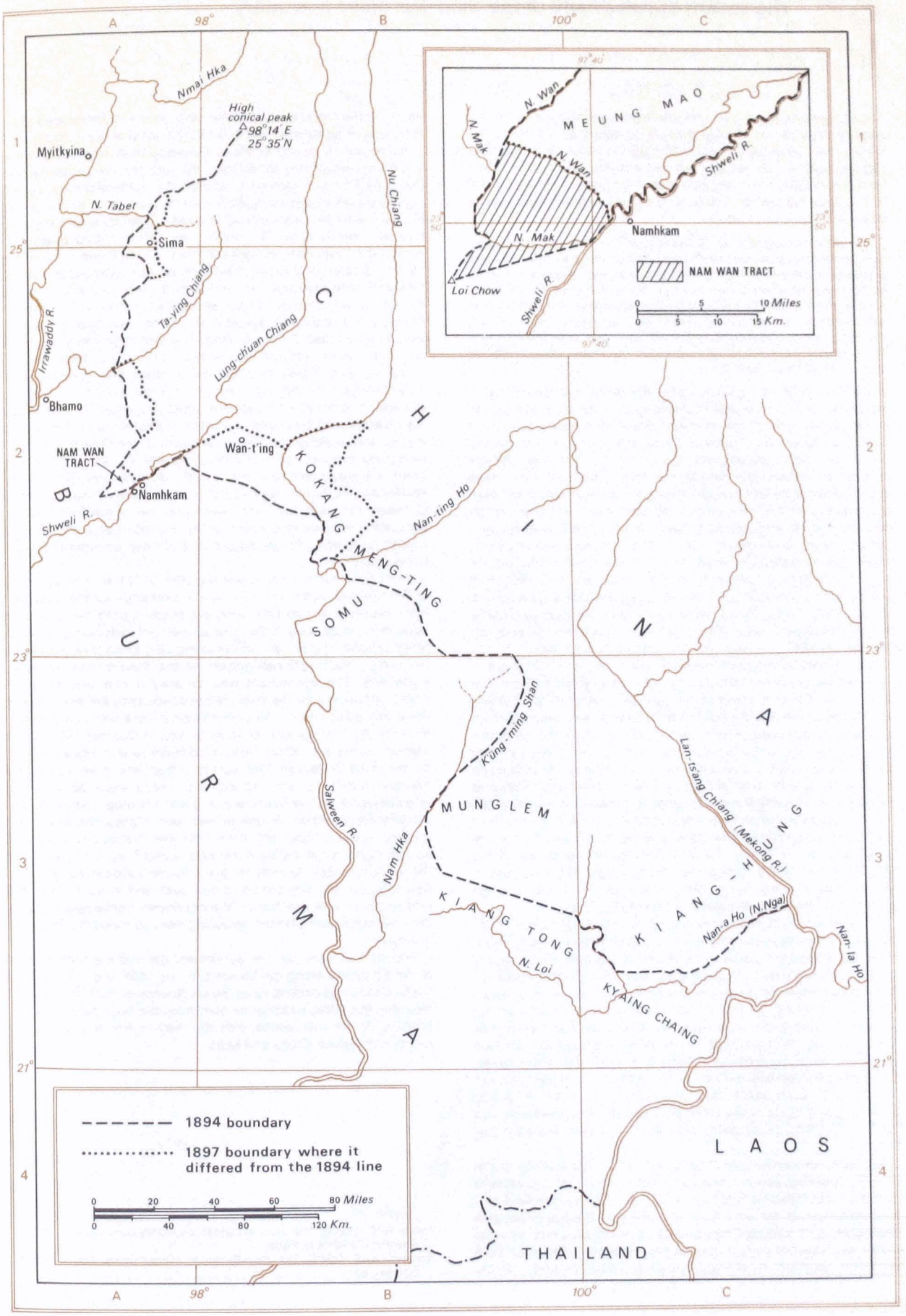
Britain had received conflicting advice about the best attitude to adopt towards these political units. Scott suggested that Kiang-Hung and Munglem, which owed allegiance to both Burma and China, should be formed into a Sino-British condominium, with the aim of strengthening British control in the Shan states and frustrating France in Laos and Thailand. Daly and Warry advised against any condominium; instead they suggested that Munglem should be left to China unless it could be proved to contain valuable mineral deposits, while Kiang-Hung should be partitioned at the Mekong. The British authorities followed neither course and left both Munglem and Kiang-Hung to China providing that no part of these states was ever ceded to a third country.

Within two years France, advancing through Laos, had forced China to cede part of Kiang-Hung and Britain insisted on a revision of the 1894 treaty. Curiously all the revisions occurred west of the Salween river. Britain gained 453 sq. km (175 sq. m) around Sima in the Nam Tabet valley, and obtained a boundary which was easier to defend and more clearly marked than its predecessor. A similar area was ceded between the Ta-ying Chiang and the Nam Wan. Between the Shweli and Nan-ting Ho Britain secured 3366 sq. km (1300 sq. m) which included Wan-t'ing and the whole state of Kokang. Finally, a triangular area of 220 sq. km (85 sq. m) called the Nam Wan tract became effectively British. While the area remained nominally Chinese and rent was paid by Britain, that country exercised effective control over the area.

Between 1897 and 1899 two sections of the boundary were demarcated. The first stretched from the conical high peak to the Nan-ting Ho, and the second from the Nam Hka to the Mekong. This meant that a gap measuring 257 km (160 m) remained in the Wa states between the Nan-ting Ho and the Nam Hka. As the next section describes this gap was closed in 1941.

Tinker, H. (1956) Burma's northeast borderland problems. *Pacific Affairs*, 29: 324–46.

Walker, J. T. (1892). Expeditions amongst the Kachin tribes on the northeast frontier of Upper Burma. *Proceedings of the Royal Geographical Society*, n.s., 14:161–72, 204


A
98°
B
100°
C
1
25°
2
23°
3
21°
4
Myitkyina
Nmai Hka
High conical peak 98°14′E 25°35′N
N. Tabet
Sima
Nu Chiang
Ta-ying Chiang
Lung-chuan Chiang
Irrawaddy R.
Bhamo
NAM WAN TRACT
Namhkam
Shweli R.
Wan-t'ing
KOKANG
MENG-TING SOMU
Nan-ting Ho
BURMA
CHINA
Kung-ming Shan
Salween R.
Nam Hka
MUNGLEM
Lan-tsang Chiang (Mekong R.)
KIANG-HUNG
KIANG TONG
N. Loi
Nan-a Ho (N. Nga)
Nan-la Ho
KYAING CHAING
LAOS
THAILAND
97°40′
N. Wan
MEUNG MAO
N. Mak
N. Wan
Shweli R.
23°50′
Namhkam
N. Mak
NAM WAN TRACT
Loi Chow
Shweli R.
0 5 10 Miles
0 5 10 15 Km.
1894 boundary
1897 boundary where it differed from the 1894 line
0 20 40 60 80 Miles
0 40 80 120 Km.

25 The recent development of the Sino-Burmese boundary

The last section described how the demarcation at the turn of the century left a gap of 257 km (160 m), occupied by the Wa states, where the boundary had been defined but not marked. Occasionally problems occurred in this borderland and in 1935 a joint commission under the auspices of the League of Nations met to consider the matter. Toller, who served with this commission described the main problem:

> . . . the difficulty was rather an excess of definition. The treaty defined the frontier not only in physical terms (generally speaking as the watershed between the Salween and Mekong), but also in political terms, assigning the territories of certain local rulers to China or to Burma. Unfortunately however the two lines did not coincide. The territories of the chiefs would spill over the watershed; moreover they were fluctuating and ill-defined, and were further complicated by the fact that some areas might owe a form of allegiance, indicated by the periodic payment of tribute, to two or three rulers at once (Toller, 4).

The Iselin Commission, named after the Swiss colonel who led it, was presented with a welter of claims advocating lines as much as 40 km (25 m) apart. The report and maps were produced in April 1937, but agreement between China and Britain based on the report was not secured until June 1941; by this time demarcation was a very low priority for both countries. The maps accompanying the Iselin report showed nine boundaries; the map opposite shows the three most important ones. First, there is the boundary which was agreed between Britain and China; second, the boundary favoured by the majority of the commission is shown where it deviates from the 1941 line; third, China's claim is shown where it differs from the other two boundaries. A comparison of the first two boundaries shows that Britain gained 181 sq. km (70 sq. m) as a result of the 1941 line lying east of the majority boundary, while China gained 1414 sq. km (546 sq. m) through the 1941 line lying west of the majority boundary.

The greatest divergence between the boundaries occurred in the head-waters of the Nan-hsu Ho, Nam Hka Hkao and Nam Hka Lam, where China claimed as far west as Kawnghsang. If China had achieved this line it would have produced two deep adjacent salients; the Burmese salient would have consisted of the upper Nam Ma, and the Chinese would have intersected that river near Kawnghsang. Such a boundary may have been more difficult to administer than the selected line. It was generally considered at the time that the prize in this region concerned access to reported mineral deposits rather than lines of strategic security. Much of the border was known to be heavily mineralized, and one of the areas secured by Britain, around Lu-fang, contained some old Chinese silver mines. China was given a right to participate in mining ventures on the eastern slope of the Lu-fang ridge providing Chinese equity did not exceed 49 per cent.

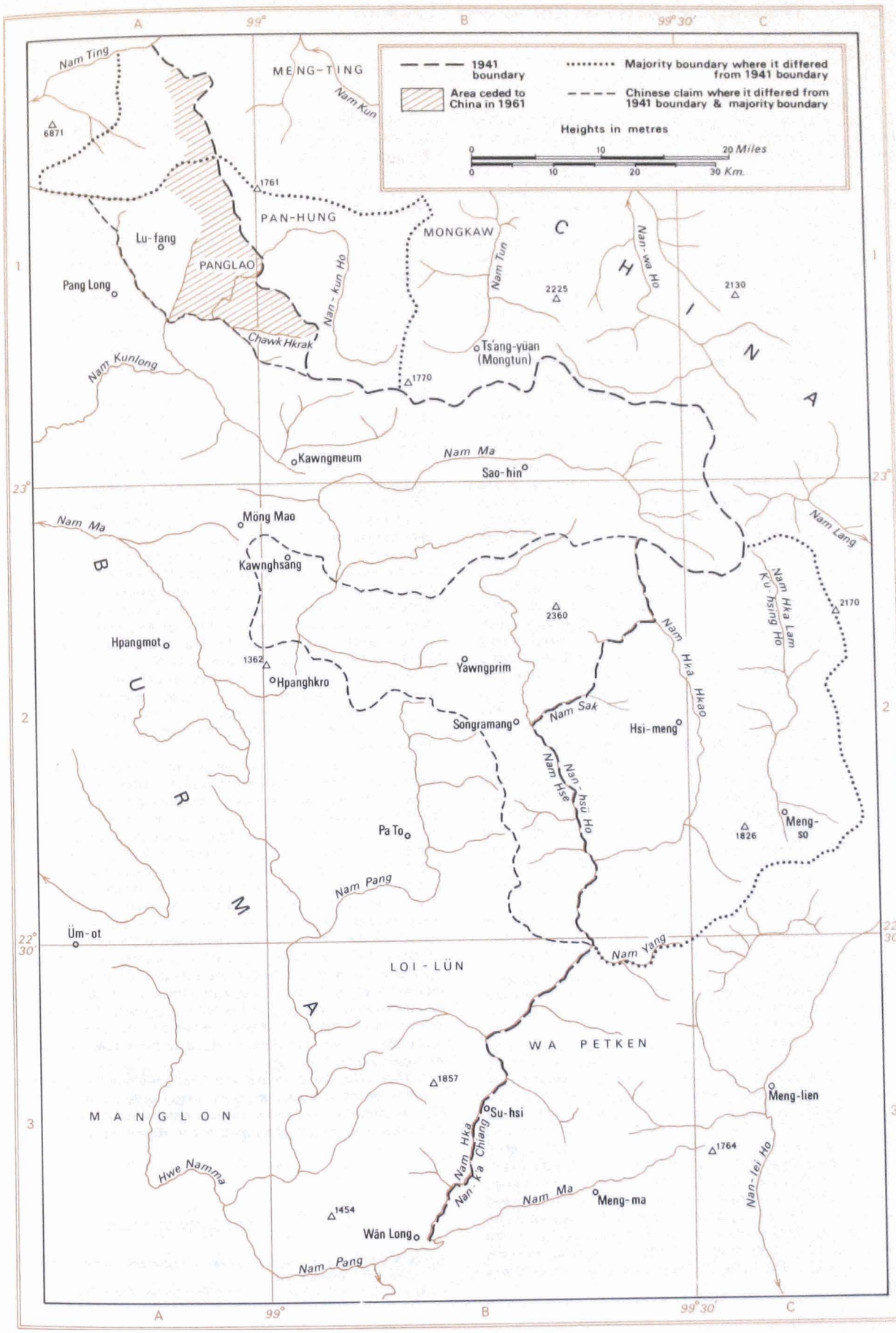
Thus when Burma became an independent state the Sino-Burmese boundary was defined in a number of different ways. North of the high conical peak there was no boundary fixed by any treaty, but there was a functioning *de facto* limit. The alignment of a Sino-Burmese boundary was shown in the various maps associated with the 1914 Simla conference, but the results of that conference had been repudiated by China as soon as it was concluded. South of the high conical peak two long sections had been defined in the treaties of 1894 and 1897 and demarcated. The linking section was defined by the agreement of 1941 but not demarcated. Both sides had extra-territorial rights in lands ostensibly belonging to the other. Burma controlled the Nam Wan tract while China could participate in mining ventures near Lu-fang.

Whittam has carefully reconstructed the events leading to the Sino-Burmese agreement. Burma was one of the first countries to recognize the People's Republic of China, and the question of a final settlement of the boundary was raised by the Burmese soon afterwards. At that time China was too preoccupied with internal affairs and did not pursue the matter. Between 1953 and 1956 Burmese troops operating against Kuomintang forces encountered Chinese communist units in areas considered to be Burmese. Requests to Peking for the removal of the units brought a response indicating Chinese dissatisfaction with the existing boundary. According to Whittam the first tangible proposal was made by China. It offered to accept the 1941 boundary, and to concede part of the Nam Wan tract to Burma, in exchange for Hpimaw and two associated villages, Gawlum and Kangfang, located near latitude 26° north. The Chinese also offered to accept the traditional, customary line in the extreme north of the border, a reference which the Burmese assumed applied to the McMahon line. This assumption induced the Burmese to offer 145 sq. km (56 sq. m) around Hpimaw as the territory to be ceded to China, on the understanding that the resident Kachins of that area would be resettled in Burma. When this firm offer was transmitted to China their response showed there had been a misunderstanding. China rejected the concept that Hpimaw could be exchanged for the Nam Wan tract, since both were properly Chinese, and made a number of counter proposals. First, the Nam Wan tract would be ceded to Burma in exchange for territory in the Wa states along the 1941 line. Second, the area to be ceded by Burma around Hpimaw should be 482 sq. km (186 sq. m). Third, the traditional line in the north did not coincide with the McMahon line, but lay west of it in certain areas where there were Chinese monasteries and medicinal herb gardens. These proposals were unacceptable to the Burmese and negotiations ceased until late 1959 when a new Burmese government made fresh overtures.

The main new ingredient was the offer of 161 sq. km (62 sq. m) to China along part of the 1941 line in exchange for the Nam Wan tract. Within a few months progress made it possible to sign an agreement in January 1960. This agreement retroceded to China areas around Hpimaw and in the Mong Ling Shan in return for the Nam Wan tract and recognition of the Sino-British boundary elsewhere. The agreement also created a commission which would adjudicate on the rival claims concerning the exact size of the areas transferred. The commission's work was completed in time for the final agreement to be signed in October 1960. China gained 153 sq. km (59 sq. m) around Hpimaw and 189 sq. km (73 sq. m) in the Wa states. The Nam Wan tract which went to Burma measured 220 sq. km (85 sq. m). There were some minor alterations along the boundary to avoid dividing villages and to simplify demarcation. Burma gained four villages and ceded two villages by the realignment of the 1941 line. Burma also gained 13 sq. km (5 sq. m) in the far north and ceded 5 sq. km (2 sq. m) in the eastern sector to simplify the boundary's demarcation. The demarcation was completed in one year and in addition to 300 pillars which were erected on the previously unmarked sections, the commissioners planted flowering trees to make the line more obvious.

For the first time the new agreement defined the short section of the boundary along the Mekong. In the 1894 and 1897 treaties the terminus was described as the confluence of the Nam Nga and Mekong; the latest description continues the boundary along the Mekong to its confluence with the Nan-la Ho; this is the tri-junction of Burma, China and Laos.

Toller, W. S. (1949). The Burma-Yunnan boundary commission, pts 1, 2. *Eastern World*, May, June.
Whittam, D. E. (1961). The Sino-Burmese border treaty. *Pacific Affairs*, 34:174–83.


1941 boundary
Area ceded to China in 1961
Majority boundary where it differed from 1941 boundary
Chinese claim where it differed from 1941 boundary & majority boundary
Heights in metres
0 10 20 Miles
0 10 20 30 Km.
A
B
C
99°
99° 30′
23°
22° 30′
1
2
3
MENG-TING
PAN-HUNG
MONGKAW
PANGLAO
LOI-LÜN
WA PETKEN
MANGLON
CHINA
BURMA
Nam Ting
Nam Kun
Lu-fang
Pang Long
Nan-kun Ho
Chawk Hkrak
Nam Kunlong
Nam Tun
Nan-wa Ho
Ts'ang-yüan (Mongtun)
Kawngmeum
Nam Ma
Sao-hin
Nam Lang
Möng Mao
Kawnghsang
Hpangmot
Hpanghkro
Yawngprim
Songramang
Nam Sak
Nam Hka Hkao
Hsi-meng
Nam Hka Lam Ku-hsing Ho
Nam Hse
Nan-hsü Ho
Meng-so
Pa To
Nam Pang
Üm-ot
Nam Yang
Su-hsi
Nam Hka Nan Ka Chiang
Meng-lien
Nan-lei Ho
Hwe Namma
Meng-ma
Wän Long
6871
1761
1770
2225
2130
2360
2170
1362
1826
1857
1764
1454

26 The boundary between Burma and Thailand

Thailand was one of the Asian states which were left as buffers between competing major powers, a strategy much favoured by Britain around the edge of British India.

The Thai-Burmese boundary stretches for 1802 km (1120 m) from the Andaman sea in the south to the Mekong river at 20°22' north. The boundary has a symmetrical appearance. The two terminal sections correspond with the thalwegs of the Nam Hok, in the north, and the Pakchan river in the south. The thalweg is the line of continuous deepest water in a river. The central section corresponds with the thalwegs of the Salween and Thaungyin rivers. The central section is connected to the terminal thalwegs by lines following watersheds, although at four points along these watersheds locally important rivers have cut back through them, and these rivers have been divided between the two countries. North of 20° north, the borderland consists of long granite masses which have been fashioned into ridges and plateaus with a general elevation of 1650–1950 m (5400–6400 ft). Granite again forms the main watershed south of 15° north, although adjacent ridges are capped with shales and sandstones, and the highest peaks do not exceed 1250 m (4100 ft). In the intervening area the geological structure is complex and limestone is an important element. This is particularly true of the headwaters of the Thaungyin where karst topography is found. Tropical forest is found throughout the borderland; in the peninsula it is evergreen, but the longer dry periods of the northern section encourage some deciduous species.

This borderland, in common with many others in southeast Asia, has been the target for migrations from a variety of directions, and a complex ethnic pattern developed as small communities settled and survived and sometimes amalgamated. Conquest and reconquest by Thai and Burmese armies as they swept across this borderland at different times left a confusing mosaic of small states and tributary relations. This characteristic clearly distinguishes the Thai-Burmese boundary into two sections according to its basis and the ease with which it was drawn. South of the confluence of the Salween and Thaungyin rivers the frontier between Burma and Thailand was narrow, and it did not prove necessary to spend much time discussing the indigenous political organizations; this section was quickly fixed along various physical features. North of the confluence the frontier was much wider and both Britain and Thailand argued strongly over the rights of the indigenous small states separating their territories. Eventually British strength cut short the proper debate and the small states were allocated on the basis of their relation to physical features; this was a decision which was challenged unsuccessfully by Thailand.

Britain became a neighbour of Thailand when it acquired the territory of Tenasserim from Burma in 1826; even at that time, according to Fytche, the boundary with Thailand was well known:

> Tenasserim extended in the north from the Thoungyeen river to the well-defined line of the Pak-Chan river in the south . . . and on the eastern side a boundary, supposed to be formed by the Central Ranges dividing the watershed, separated it from the Kingdom of Siam (Fytche, 26).

This *de facto* boundary was confirmed by Fytche and Thai representatives in 1864 near the Pakchan river, and it was surveyed and marked by the beginning of 1868 when it was described in a formal treaty. The commission which did this work described the line in simple terms and produced a table of the fifty-one markers which had been erected along the 1126 km (700 m) of boundary. This boundary has remained in the location fixed then, apart from a small section along the Pakchan river which changed its course abruptly late in 1932 by cutting through the narrow necks of four meanders. Both administrations agreed to exchange the four small parcels of land transferred from one side to the other in 1934. They were each small in extent and the revenue derived from them was negligible. Similar agreements were made when the Meh Sai changed course slightly in 1929 and 1938.

The careful boundary definition in 1868 did not assign various islands in and near the estuary of the Pakchan river. To settle this problem Britain suggested that the Saint Matthew and Bird's-nest groups should belong to Britain since they had never been claimed by Thailand, and that the remaining islands should be assigned on the basis of nearness to the Thai and Burmese coasts. This proposal was accepted and accordingly Britain also acquired Victoria Island while Thailand secured Ko Chang and Ko Phayam. This early Asian maritime boundary has survived to the present time.

As Britain extended its influence northwards through Burmese territory the question of the continuation of the 1868 boundary became important. The problem hinged on the fact that some small indigenous states, which were currently owing allegiance to Burmese authorities held territory on both banks of the Salween river; therefore the dilemma for Britain was either to accept the Salween as a boundary and forgo the trans-Salween territories, or to take control of these territories and forgo the use of the most obvious boundary in the region. There was a further complication. It only made sense to stop the British advance at the Salween if it was certain that the trans-Salween areas would be held by Thailand or China, thus keeping France at a distance from Burma. If Britain could not avoid a common line with French Indo-China then it made sense to fix that boundary as far east as possible, away from the real core of British Burma.

There were three states separated by the Salween. First there was the territory occupied by the Red Karens. Western Karenni consisted of Bawlake, Naungpale, Nammehek and Kyebogyi; Eastern Karenni contained only one state, namely Gantarawadi which occupied both banks of the river and had its capital at Sawlon. North of Karenni was the Shan state of Mawkmai with its tributaries Mong Mau and Me Sakun. Finally Mong Pan lay north of Mawmai; it consisted of four territories: Mong Hkut, Mong Hang, Mong Ton and Mong Hta. During the negotiations which led to the boundary definition of 1894 Thailand claimed the west bank areas of Gantarawadi and Mong Pan; both claims were eventually rejected by Britain.

Thailand's claim to trans-Salween Gantarawadi was based first on an alleged treaty of 1882 which ended conflict between the two states; according to the treaty the Salween would form the boundary but the citizens of Gantarawadi would be allowed to use the land between the river and the main watershed to the east. Thailand's claim was also pressed early in 1890, after Thai forces had helped the British authorities defeat Gantarawadi's forces which had raided deep into Mawkmai. Thailand's claims to the four trans-Salween states of Mong Pan were based on their alleged annexation in 1790. British authorities resisted both these claims and the present boundary was fixed and demarcated in the winter of 1892–3 by two survey parties operating west and east of Loi Un. In the northern section the sub-state of Mong Hsat was also claimed by Thailand, but again the claim failed, although certain villages belonging to Kentung, a powerful Shan state of Burma, were left to Thailand. Provision was made for the repatriation of any population judged to have been left on the wrong side of the boundary.

In May 1963 the Burmese and Thai governments agreed to promote peace and security along their border, and appointed four committees to suppress crime, to ensure national security for both sides, and to deal with any other boundary problems.

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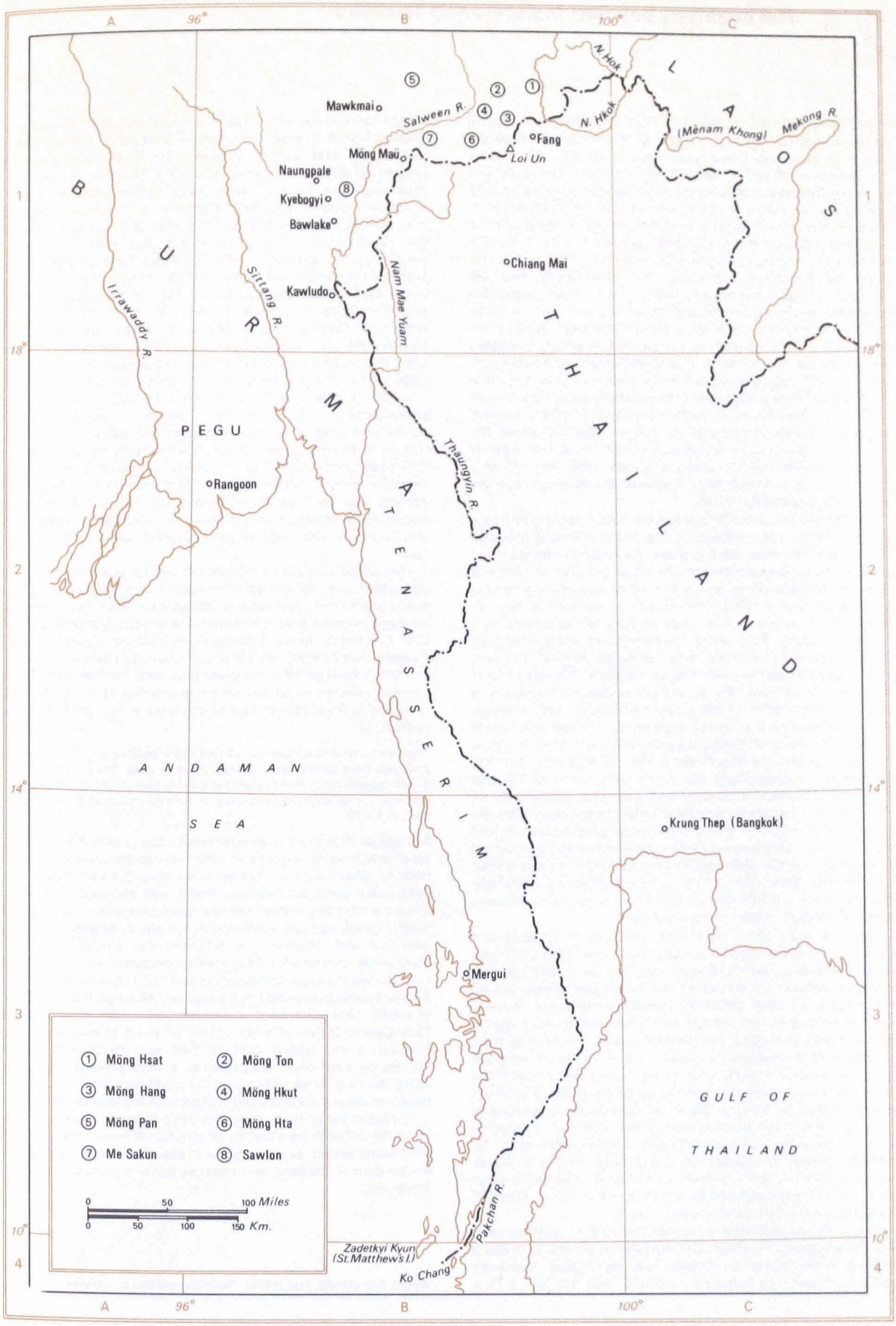
Mangrai, S. S. (1965). *Annexation of the Shan States.* Ithaca, N.Y.


A
96°
B
100°
C
Mawkmai
Salween R.
Möng Mau
Naungpale
Kyebogyi
Bawlake
Kawludo
Fang
Loi Un
N. Hok
N. Hkok
(Mènam Khong) Mekong R.
LAOS
Chiang Mai
Nam Mae Yuam
Sittang R.
Irrawaddy R.
BURMA
PEGU
Rangoon
THAILAND
Thaungyin R.
TENASSERIM
ANDAMAN SEA
Krung Thep (Bangkok)
Mergui
GULF OF THAILAND
Pakchan R.
Zadetkyi Kyun (St.Matthews I.)
Ko Chang
1 Möng Hsat
2 Möng Ton
3 Möng Hang
4 Möng Hkut
5 Möng Pan
6 Möng Hta
7 Me Sakun
8 Sawlon
0 50 100 Miles
0 50 100 150 Km.
18°
14°
10°
1
2
3
4

27 The boundary between Malaysia and Thailand

The boundary between Malaysia and Thailand follows an irregular course across the narrow Kra isthmus. This means that while the termini on the east and west coasts are only 217 km (135 m) apart the boundary stretches for 515 km (320 m). Generally the boundary follows watersheds; the exception occurs in the eastern section where it follows the Kolok river across a level, alluvial plain used for rice cultivation. From the headwaters of the Kolok the boundary follows the water-parting between the Sai Buri river flowing north and the Pergau river flowing south; it then continues along the watershed separating the rivers flowing into the Thailand gulf and the Malacca strait. The summits along the watershed rarely exceed 1525 m (5000 ft), and they form the northern extensions of the main Malayan ranges. The hills are composed of intrusive granites surrounded by tertiary quartzites and shales. North of the Muda river's headwaters the landscape is lower and the valleys wider and more open, and east of Kangar there is a flat alluvial plain similar to the Kolok valley. The final 24 km (15 m) of the boundary follows the Sayun range, a narrow, limestone feature standing about 610 m (2000 ft) above the surrounding plains. The whole borderland has a wet, tropical climate and the rainfall, which averages 1905 mm (75 in.), combines with uniformly high temperatures to encourage the growth of dense tropical forest.

Early British interests in this area were concerned with securing control over the strait of Malacca. The island of Pinang provided an excellent base from which to guard the western entrance of the strait and this was acquired from the sultan of Kedah in 1786 and renamed Prince of Wales Island. In 1800 an area of the adjoining mainland, called province Wellesley, was secured to provide defense for Pinang from any attack by land and to provide food for the inhabitants of the island. The boundaries of Wellesley were fixed by agreement with the sultan of Kedah in 1831 and then confirmed by agreement with Thailand in 1869. The other end of the strait was safeguarded by the annexation of Singapore in 1819, and confirmation of this act by the Dutch in 1824, when the two countries drew a boundary separating their territories north and south of the strait. By this agreement Britain acquired a third foothold, namely the Dutch settlement of Malacca, and the boundaries of Malacca with the neighbouring states of Rembau and Johol were fixed in January and June 1833 respectively. In 1826 a fourth base was presented to Britain by the rajah of Perak. This ruler was unable to control pirates operating in this area and welcomed a British presence on Dinding island which is 64 km (40 m) south of province Wellesley. These four bases became known as the Straits Settlements, and this title accurately reflected their value to Britain, which was primarily concerned with the safe passage of British vessels through the strait.

After the early 1870s increasing numbers of Chinese and British merchants and miners began to operate in the peninsula. These commercial activities were hindered by pirates and the unsettled political conditions in the indigenous states. British authorities were often asked for assistance but these requests were rejected on the ground that the traders and miners knew the risks and must accept them as part of the liability in trying to make financial profits. However, as more and more British subjects became involved, the governor of the Straits Settlements was instructed to see whether anything could be done to promote orderly commerce. General Clarke followed these instructions by involving himself with warring factions in Perak and persuading the rajah to accept a British Resident, whose advice would be followed except in respect of Malay religion and customs. Gradually the residency system was also established through Selangor, Pahang and Negri Sembilan, which in 1895 united with Perak to form the Federated Malay States.

Eventually the extension of British interests brought contacts with Terengganu, Kelantan and Kedah, over which Thailand claimed some authority; Britain had recognized Thailand's authority in Kedah by treaties in 1826 and 1869. Wright and Reid (1912) have shown that Thailand's authority had ebbed and flowed over this area many times producing a complicated pattern of relationships between the Thai court and the indigenous states. The construction of a boundary through this zone was done in two stages. First, Britain obtained French agreement to identify respective spheres of influence in the Thai borderlands. This was done in 1896 when both countries agreed they would never move troops into that area of Thailand comprising the drainage basins of rivers lying between Bang Tapan in the west (about latitude 11°10' north) and the Pase river in the east (about longitude 99°28' east). It was implicit in this agreement that areas west of Bang Tapan fell into the British sphere of influence, while areas east of the Pase river were left to France. This point was made explicit in 1904, but before then, in 1897, Britain had persuaded Thailand to agree that it would not cede any land south of Bang Tapan to any other country.

In 1899 Britain and Thailand drew a boundary between their possessions on the peninsula. It started in the west at the southeast corner of province Wellesley and followed the Kerian river to its source, whence it continued easterly through Gunong Kenderong and Lubok Toping, before eventually turning south along the main watershed between the British states of Perak and Pahang and the Thai state of Kelantan. Finally the boundary swung eastwards separating Pahang and Thailand's Terengganu and ended on the coast at point Geland, about latitude 4°10' north.

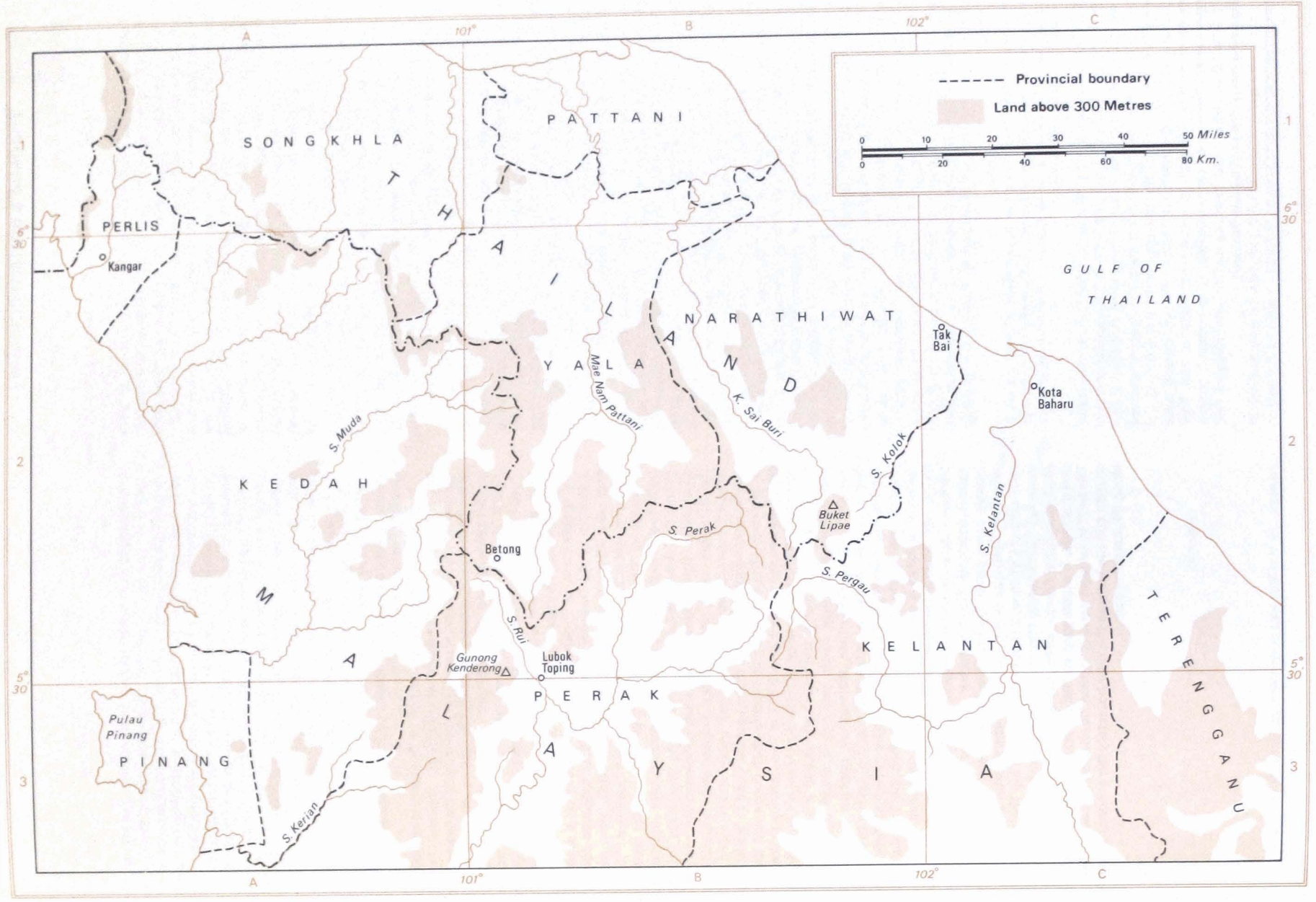
The settled condition of the British territories south of the line contrasted with the unsettled situation in the neighbouring Thai states of Kelantan, Terengganu, Kedah and Perlis. Two unrelated incidents involved Britain in these trans-boundary areas. First, Mr Duff decided to found a company to develop a large area of Kelantan and he obtained a title from the sultan. When he went to the British Foreign Office he found they were not prepared to give him any assistance. So he told the authorities he would float his company in Paris and St Petersburg not London: the effect was immediate.

> I was then asked to sit down — we had been standing up to this point — and I was there for two hours instead of two minutes. The upshot was that a promise was made that I would have the support of the British Foreign Office, if I established my company in Kelantan (quoted in Wright and Reid, 159–60).

Second, in 1905 the Thai government began to search for funds to build a railway through its southern territories, and by 1907 it became apparent that it was likely that German funds and companies would be involved. Britain was opposed to German influence intruding in this area and raising the problems they had faced in west, east and southwest Africa and so negotiations were resumed with Thailand to advance the British boundary northwards. In return for the territorial concessions Britain offered to renounce the extra-territorial rights it had acquired in 1883 and Thailand quickly accepted this proposal. Although the new treaty of March 1909 referred to the cession of Kedah, Kelantan and Terengganu, Britain did not obtain all the first two territories, however it did obtain part of Yala and Narathiwat states. Apparently both countries preferred a clear physical boundary along the watershed rather than the traditional lines which were harder to describe, survey and recognize in the landscape.

In recent times both countries have faced problems in this borderland due to the activities of communist rebels, especially in the Betong salient, because of the irredentist Malay movement in the borders of Thailand, and because this is a profitable area for smuggling.

Wright, A. and Reid, T. H. (1912). *The Malay peninsula*. London.


Provincial boundary
Land above 300 Metres
0 10 20 30 40 50 Miles
0 20 40 60 80 Km.
SONGKHLA
PATTANI
PERLIS
Kangar
THAILAND
NARATHIWAT
Tak Bai
Kota Baharu
GULF OF THAILAND
YALA
Mae Nam Pattani
K. Sai Buri
S. Kolok
S. Muda
KEDAH
Buket Lipae
S. Perak
S. Kelantan
Betong
S. Pergau
S. Rui
Gunong Kenderong
Lubok Toping
KELANTAN
TERENGGANU
PERAK
Pulau Pinang
PINANG
S. Kerian
MALAYSIA
A
B
C
101°
102°
1
2
3
6° 30'
5° 30'

28 Thailand's eastern boundary

Thailand's boundary with Laos and Cambodia extends for 2574 km (1600 m) and was drawn by various treaties agreed between Thailand and France in the period 1867–1925. Apart from a short section crossing the valley west of Boeng Tonle Sab the boundary is coincident with watersheds and rivers. The Cardamones and Dangrek ranges carry the boundary from the sea to the confluence of the Mun and Mekong rivers. The isolated Cardamones, with peaks over 1525 m (5000 ft) are composed of sandstones which have been dissected into deep, short valleys. They are subject to high annual rainfalls of about 5080 mm (200 in.) which promote dense tropical forest. The linear Dangrek chain is also composed of sandstones, but there are few peaks above 610 m (2000 ft) and the lower annual rainfall supports a more open woodland. This range is not symmetrical and the steeper scarp overlooks Cambodia. North from the confluence of the Mun and Mekong rivers the boundary follows the latter watercourse as far as its confluence with the Nan Huang; at this point the line is diverted to follow the tributary to its source and then the watershed between the Mae Nam Nan and the Mekong.

France secured its foothold at the mouth of the Mekong when Annam ceded the provinces of Bein Hoa, Gia Dinh and My Tho, in 1862. France considered that it also inherited Annam's rights in Cambodia, a weak state subject to demands by both Thailand and Annam. In 1863 Cambodia negotiated secret, conflicting treaties with Thailand and France. By July 1867 France and Thailand had resolved this situation; Thailand recognized France's protection of Cambodia and relinquished any rights to tribute from that country, and in return France recognized that the provinces of Batdambang and Siemreab became part of Thailand.

The scene now shifts to the northern section of the boundary. France annexed the rest of Annam and Tonkin in 1884 and soon French officers were seeking to exert Tonkin's former rights in the area of Laos. The fragmented nature of the Laotian political structure at that time meant that France was able to adopt a piecemeal approach to the annexation of individual sub-states. The British Foreign Office was warned in November 1887 that France may wish to extend its influence to the Mekong's eastern watershed, but this did not concern that department because they were convinced that this was Thailand's eastern boundary. By 1893 however, the situation had changed and France had fixed on the east bank of the Mekong as the proper limit of its possessions in Annam and Tonkin. The British authorities were able to demonstrate the illogicality of the French arguments in support of that course, but logic was discarded as national self-interest became dominant (Prescott, 431–2). In February 1893 France forced a quarrel on Thailand alleging Thai aggression against Annam. Stoeng Treng was captured by France on the Mekong, and Thai resistance led to the first French ultimatum in April 1893. Thereafter French pressure increased in a way which was described by the British ambassador to Paris in the following terms.

> The Siamese Government were now in possession of an ultimatum, a penultimatum and an ante-penultimatum. In fact the word 'ultimatum' had completely lost its meaning, for each new one seemed to procreate a successor (quoted in Prescott, 432).

Thailand capitulated and by the treaty of 1893 France made major territorial gains. The Mekong was fixed as the boundary north of latitude 13°14' north, and Thailand renounced all claims to any islands in the river, and agreed that it would not station any troops within 25 km (15 m) of the Mekong or in the provinces of Batdambang and Siemreab. In addition French citizens were given complete freedom to move and trade in the Thai demilitarized zones and France was allowed to remain in control of Chantaburi, which had been captured, until Thailand had complied with all the conditions of the treaty.

France's advance to the Mekong had given it the eastern half of Louangphrabang and this began to lead to claims for the rest of the state lying west of the Mekong. That area was won in February 1904 when France also secured a large area south of the Dangrek range. This region south and west of Bassac measured about 15 534 sq. km (6000 sq. m); it lay south of the Dangrek and east of the meridian through the Kompong Tiam. France also exercised its right by the 1893 treaty to acquire coaling stations on the Mekong at Khemmarat, Mukdahan, Nong Khai and Chiang Khan. A further agreement in June 1904 extended the French area of control near the termini of the boundary. In the north France gained areas in the upper valley of the Nam Huang and the Kop valley; in the south France gained about 6475 sq. km (2500 sq. m) of the Cardamones and the coastal plain about Trat. It was stated in the agreement that this last Thai concession 'establishes a natural boundary'. Whatever the term 'natural' means it cannot be applied to a line which cuts across the grain of a mountain range, bisects a featureless plain and tacks on half an estuary to a state lying beyond the mountains!

In March 1907 this curious section of boundary disappeared, but once again the chief cost was borne by Thailand. France retroceded the Cardamones and Trat lowland and the headwaters of the Nam Huang, totalling 2460 sq. km (950 sq. m) in exchange for Batdambang and Siemreab which measured 32 104 sq. km 12 400 sq. m). This treaty also made provision for the demarcation of the boundary which was completed by the end of 1908, without any serious difficulty. However, the demarcation left a problem which surfaced in 1949. According to the survey maps the temple ruins of Preah Vihear, which stand on a southern projection of the Dangrek escarpment about longitude 104°44' east were left south of the boundary in Cambodia. However the area was occupied by Thailand. When the case went to the International Court of Justice in 1961 the verdict went in Cambodia's favour, even though the boundary was supposed to follow the watershed, which lies along the edge of the escarpment. One subsequent problem concerned the course of the boundary along the Mekong. France and Thailand had different interpretations of the 1893 treaty which noted that Thailand renounced all claims to the east bank and to 'the islands of the river'. The difference in interpretation concerned islands which sometimes became joined to the Thai bank by deposition and new islands formed when the river cut through a meander on the Thai side. The matter was eventually settled in 1926 when it was agreed that where there was only a single channel the boundary would follow the thalweg, or deepest continuous channel; where there was more than one channel the thalweg of the channel nearest the Thai bank would form the boundary; if the channel nearest the Thai bank dries up then the boundary will continue to follow it unless a joint commission rules otherwise. Eight river lands were specified as being attached to the Thai bank and therefore part of Thailand. In 1975 and 1976 there were serious incidents along this river boundary when Thai patrol vessels came under fire from the Laotian bank. The boats were near Don Nois, one of the eight river lands about 30 km (18 m) southeast of Vientiane, and appeared to be on the Thai side of the boundary. Considering that the present boundary was imposed on Thailand by French force and puts Thailand at a marked disadvantage, it would need cordial relations between Laos and Thailand to prevent serious friction developing. If Laos takes a militant attitude towards this river boundary the chance for peace along this border is poor.

Prescott, J. R. V. (1975). *Map of mainland Asia by treaty*. Melbourne.


Areas Ⓐ and Ⓑ ceded to France 13 February 1904
Areas Ⓒ Ⓓ Ⓔ and Ⓕ ceded to France 29 June 1904
Area Ⓖ ceded to France 23 March 1907
Areas Ⓓ and Ⓔ retroceded to Thailand 23 March 1907
Land above 200 Metres
0 50 100 150 Miles
0 50 100 150 200 Km.
BURMA
Louangphrabang
Ⓕ Western Kop
Mae Nam Nan
Ⓐ
Mekong (Mae Nam Khong)
SOUTH CHINA SEA
Chiang Khan
Nong Khai
Ban Chai Buri
Ⓔ Nam Huang
Dan Sai
Boundary fixed on 3 Oct. 1893
FRENCH INDO-CHINA
Mukdahan
THAILAND
Khemmarat
Mae Nam Mun
Nakhon Ratchasima
Champasak (Bassac)
Thiu Khao Phanom Dongrak
Chaine des Dangrek
Chong Ken
Aranyaprathet
Ⓖ
Ⓑ
Krung Thep (Bangkok)
Huai Nam Sai
Sisŏphŏn
Siĕmréab
Stoĕng Trêng
13° 14′ 48·1″ N
Bătdâmbâng
Boĕng Tônlé Sab
Moŭng Roessei
Chantaburi
Kâmpóng Thum
Krâchêh
Pŏuthĭsăt
Ⓓ
Trat
Laem Ling
Chuŏr Phnum Krâvanh (Cardamones)
Ko Chang
Ko Kut
Ⓒ
GULF OF THAILAND
Phnum Pénh (Phnom Penh)
Laem Samit
Sài Gòn
102°
105°
A
B
C
1
2
3
4
12°
15°
18°

29 China's boundary with Vietnam and Laos

China's boundary with North Vietnam extends for 1287 km (800 m) and is continued westwards for another 418 km (260 m) by the boundary between China and Laos. These two boundaries were developed as a single line during Sino-French negotiations during the period 1885–95.

The eastern extremity of China's boundary with southeast Asia demonstrates the same physical and cultural complexity evident in the Burmese border. A number of ranges, which are continuations of the Yun-nan plateau, trend northwest to southeast; they include extensive outcrops of granite and other igneous rocks in the peaks and crests overlooking plateaus and valleys of limestone and sandstones. This geological variety in combination with the uniformity of the tropical monsoon climate has produced a mosaic of landscapes. The drainage pattern consists of major rivers flowing southeast with a rectangular pattern of tributaries. Rejuvenation of the systems has caused downcutting which is now most evident in the upper reaches, where the valleys tend to be deep and narrow. In the east, near the coast there are few peaks as high as 610 m (2000 ft), but westwards there are some peaks, such as Fan Si Pan, which reach 3050 m (10 000 ft). Tributaries draining into the Mekong are aligned northeast to southwest and the rivers flow through broader valleys than their eastern counterparts; these valleys are often flanked by sandstone plateaus. Except on limestone areas, such as Lu Khu, north of Cao Bang, the climax vegetation is forest, however, the primitive methods of shifting cultivation in parts of the borderland have reduced the incidence of some hardwoods and produced a lower, less dense tropical forest.

Population has migrated into this borderland from the north and south. There are groups derived from the non-Chinese population of Yun-nan and Kuang-hsi in the remoter parts of the borderland. For example, the Akha and Ha-ni are common on the Sino-Laotian border, while the Miao and Man groups are found in the border east of the Li-hsien Chiang. In the Yuang Chiang valley and near the coast Han Chinese and Vietnamese predominate.

The Sino-French treaties which settled the boundary in this region are not regarded as unequal by China, and there has not appeared to be any need for China to negotiate boundaries with Laos or Vietnam as it did with Burma, Nepal, Pakistan, Afghanistan and Mongolia.

In 1866–7 French officers discovered that the Mekong was not the avenue for trade with Yun-nan which had been hoped, and thereafter French interests shifted north towards Tonkin. In 1883, Jules Ferry, a spokesman in favour of French colonial expansion, justified this shift in interest:

> It is not a question of the future of tomorrow but of the future of fifty or one hundred years, of that which will be the inheritance of our children, the bread of our workers. It is not a question of conquering China, but it is necessary to be at the portal of this rich region in order to undertake the pacific conquest of it (Rambaud, 332–3).

In 1873, a French merchant in Canton arranged some commercial agreements with Annamites in Tonkin, and a French force was sent to negotiate rights to navigate on the Yuan Chiang. Fighting broke out and although Hanoi was captured it was not held. A year after this France and Annam signed a treaty which purported to open the Yuan Chiang to France. Unfortunately this country was unable to take advantage of this development because the activities of pirates and brigands made the area unsafe. Eventually France started a new attack on Tonkin which led to the first treaty with China. The fighting spread into the borderland between China and Tonkin and so the major power became involved. Colquhoun, who visited the Chinese side of the border in 1882 gives a dry account of the current Chinese view.

> When we were in the south of Yunnan we heard a good deal about the movements of the French in Tong-king, and a high official — the Tao-Tai of Yunnan-fu, the capital — passed us on his way to enquire what was going on. When we asked what this official was going to do, we were told that he was about to inquire into the action of some unruly tribes; these tribes, it is needless to say, were the French (Colquhoun, 722).

In 1885 France and China signed a treaty of peace and commerce which amongst other provisions arranged for commissioners to be appointed to identify and mark the boundary. This commission concluded its work in 1887 and the results were summarized in a convention signed in June of that year, which carried the boundary as far as the Li-hsien Chiang. The delimitation and partial demarcation of the boundary did not solve the troubles associated with pirates and brigands which plagued this border, and this was especially true in the Tinkin-Kuang-hsi region where some cities were close to areas of difficult terrain. During operations against these groups the Chinese occupied certain areas allocated to France. When this trespass was noted French authorities decided to mark the boundary between Tonkin and Kuang-hsi with greater care. Colonel Gallieni was sent to the area in 1892 and worked there for two years; both sides exchanged maps and reports in June 1894 at Lung-Chou, recording the placement of 308 pillars. There were some slight differences in the alignment of the 1887 and the 1894 boundaries, which were justified by Gallieni as follows:

> Following my instructions, the Commission strove throughout to obtain a good boundary from the point of view of defence. Following everywhere natural obstacles such as mountains and rivers, it reduced as far as possible the number of crossing points so that these routes by which bands of pirates cross from China to Tonkin, can be closed by blockhouses or posts (Gallieni, 305).

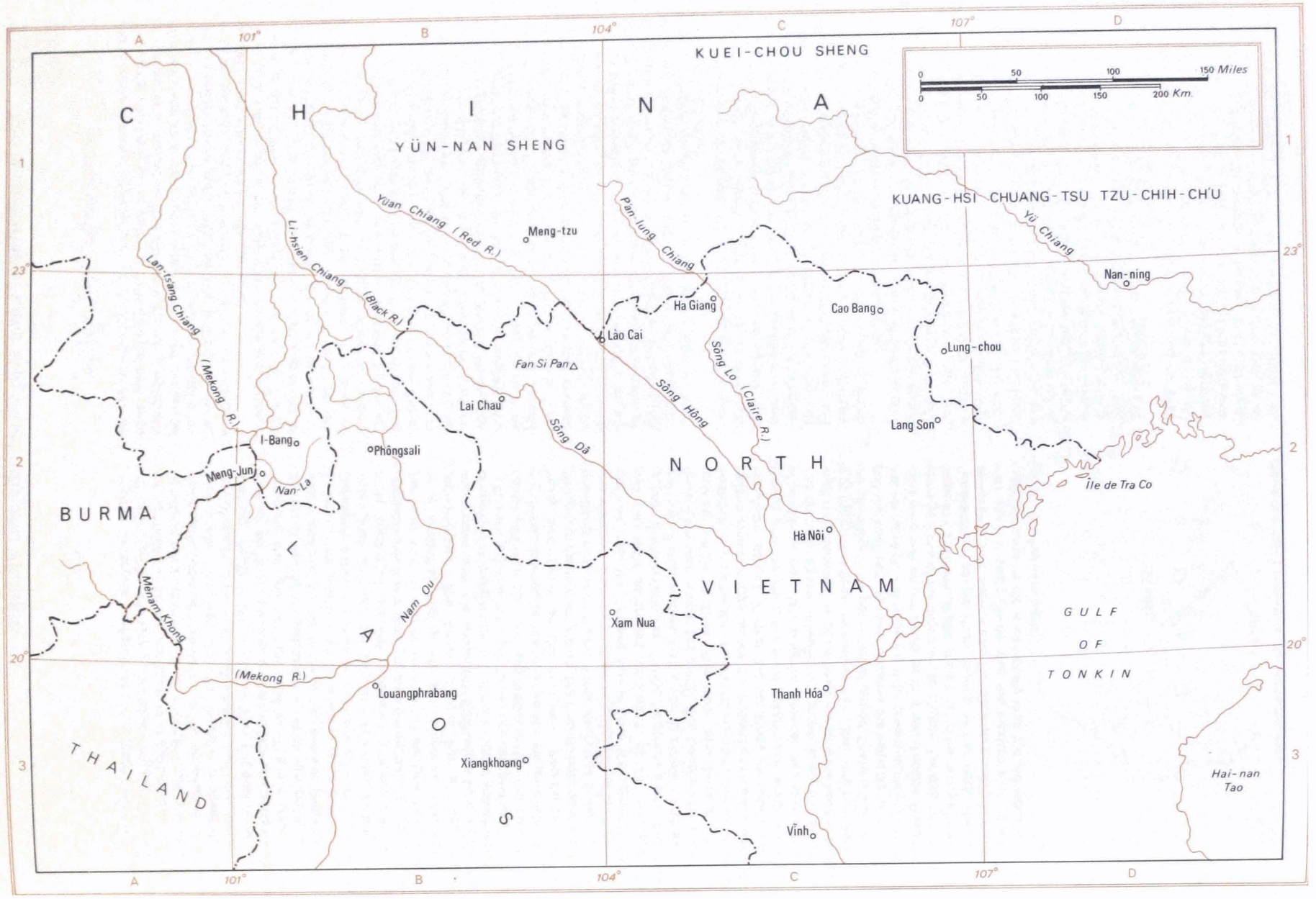
Gallieni confirmed that the Chinese were as anxious as the French to end the activities of brigands in this border, because they raided communities on both sides of the boundary, captured women and buffaloes, which were then sold to buy arms and opium to provide the basis for fresh depredations.

After France extended its control to the Mekong it was necessary to continue the Sino-French boundary west of the Li-hsien Chiang and this was done in a convention dated June 1895. This convention defined the boundary for 451 km (180 m) from the Li-hsien Chiang to the confluence of the Nam La and Mekong. The boundary followed a circuitous route mainly along watersheds, and the French government recommended the convention to the French parliament because France has secured four areas of prime concern. They were the region around Lai Chau commanding the upper Li-hsien Chiang; the district of Pu Fang, where there was reputed mineral wealth; the country around Phonsali which commands the Nam Ou valley; and the Pa-Fat-Sai region which contained eight salt springs to supply the needs of French territories. The convention also returned some areas north of Man-mai to China and extended France's territory between the Yuan Chiang and Li-hsien Chiang. This gain by France was also in an area of reputed mineral wealth. Colquhoun and others had reported caravans carrying iron, copper, silver, lead, zinc and tin out of the Chinese borderlands, although China did not encourage mining because miners were often found to be unruly people. This boundary was duly marked by fifty pillars and there are no records of further serious problems in the borderland.

Colquhoun, A. R. (1882). Exploration through the South China borderlands. *Proceedings of the Royal Geographical Society*, n.s., 4:713–30, 776.

Gallieni, Marshal (1935). Comment fut établie la frontière sino-annamite: voyage à Long-Tcheou, 15–22 juin 1894. *Revue de France*, 15 January, 294–309.

Rambaud, A. (1903). *Jules Ferry*. Paris.


A
101°
B
104°
C
107°
D
KUEI-CHOU SHENG
0 50 100 150 Miles
0 50 100 150 200 Km.
C H I N A
YÜN-NAN SHENG
KUANG-HSI CHUANG-TSU TZU-CHIH-CH'U
Yüan Chiang (Red R.)
Meng-tzu
Pan-lung Chiang
Yü Chiang
Nan-ning
Li-hsien Chiang (Black R.)
Lan-tsang Chiang (Mekong R.)
Ha Giang
Cao Bang
Lào Cai
Lung-chou
Fan Si Pan
Sông Lo (Claire R.)
Sông Hồng
Lai Chau
Lang Son
Sông Đà
I-Bang
Phôngsali
Meng-Jun
Nan-Là
N O R T H
Île de Tra Co
BURMA
Hà Nôi
V I E T N A M
Menam Khong
Nam Ou
Xam Nua
G U L F
O F
T O N K I N
(Mekong R.)
Louangphrabang
Thanh Hóa
L A O S
Xiangkhoang
THAILAND
Hai-nan Tao
Vĩnh
1
2
3
20°
23°

30 The boundaries of Laos with Cambodia and Vietnam

The boundary between Cambodia and Laos extends for 547 km (340 m) from the Dangrek mountains in the west to the main range of Vietnam west of Kontum. This latitudinal boundary effectively divides the eastern Mekong valley between the two countries, just south of the island of Khong. Apart from the section closest to the Vietnam border the boundary traverses flat, well-drained plains, which are generally forested, although the Cambodian landscape has been more extensively cleared and settled.

This boundary, together with that between Laos and Vietnam, was fixed as an internal administrative boundary by French officials, and only after World War II were these lines raised to international status. When France gained land on the east bank of the Mekong by the peace treaty with Thailand in 1893, the new territories were divided into three sections. The area of Louangphrabang was attached to Tonkin, while the middle section as far south as Khemmarat was controlled by Annam because of the good communications via Vinh and Nape. The remaining area was placed under the authority of Cochin China, with its headquarters in Sai Gon. This last arrangement made little sense because Siempang, Stoeng Treng and Attapu could only be reached from Sai Gon by traversing Cambodian territory. However the governor-general of Indo-China justified his decision on the ground that Cambodia had refused to accept responsibility for the area. He explained that this was a petty decision by Cambodia because France had not recovered the ancient Cambodian provinces of Tonle Ropou and Phumi Miu Prey from Thailand, and because the Cambodian court did not wish to entail any expense regarding this area. Chhak (32–6) refutes these comments by asserting that the rich areas of Stoeng Treng were never offered to Cambodia; the only offer concerned the Khong area of the river, which yielded no revenue, but caused expense in the provision of river patrols. It certainly seems probable that France was anxious to control directly an area which had been described in such glowing terms by Lagrée and Garnier, when they explored the river.

The inconvenience caused by this tripartite division soon impressed French administrators, and a series of temporary changes led to the creation of the unified territory of Laos in April 1899. In addition to the present territory east of the Mekong, Laos at that time included Siempang and Stoeng Treng which had been transferred with Attapu from Cochin China. Finally, in 1904 Stoeng Treng and Siempang were transferred to Cambodia and the boundary east of the Mekong assumed its present alignment. Apart from the easternmost 32 km (20 m) of the boundary, which is a straight line, this limit follows watersheds and rivers.

The need for a boundary between Laos and Cambodia west of the Mekong arose in 1904 after the Franco-Thai convention ceded Tonle Ropou, Phumi Miu Prey and Bassac to France. Ethnically there was no doubt that Bassac had more in common with Laos than with Cambodia, and therefore the problem was to draw a line separating Bassac from the other two provinces. In March 1905 French officers selected a boundary which followed the main branch of the Tonle Ropou river to the Col de Preah Chambot, which is located on a prominent southern projection of the Dangrek mountains, at longitude 105°10' east. It is possible that at the time this boundary did not coincide with the ethnic division through the area. This view is encouraged by an additional French decree in May 1905 which stated its intention to 'attach various Cambodian *muongs* [districts] to the province of Bassac'. This decree named seven districts of which the most northerly was 56 km (35 m) north of the Tonle Ropou river.

The boundary between Laos and Vietnam stretches for 2130 km (1324 m) from the Chinese border in the north to the tri-junction with Cambodia. Apart from three straight sections totalling 84 km (52 m) and four sections coincident with rivers totalling 238 km (148 m), the boundary lines are on or very close to the main watershed separating rivers draining to the gulf of Tonkin and the Mekong. The line lies entirely in uplands or mountains varying in height from 915 m (3000 ft) to 2745 m (9000 ft), which can be structurally divided at Vinh. North of the latitude of that town the borderland consists of mountains and plateaus similar to relief along China's southern territory. Valleys aligned northwest-southeast have been cut into sandstones, limestones and granite. The rivers draining towards the coast have been rejuvenated and have cut deeper valleys than those flowing to the Mekong. South of the latitude of Vinh the boundary is drawn through the Annamite ranges which have a much more complex structure than the northern uplands. These southern ranges consist of heavily eroded plateaus, which are mainly carved in sandstones and granites in the section between Vinh and the Cha Lo Valley. The isolated peaks in this area reach 2135 m (7000 ft). Between the Cha Lo and the former boundary between North and South Vietnam there are extensive limestone plateaus where karst landscapes are well developed. The Col d'Al Lao is a comparatively low basaltic region allowing easy access between the coast and the interior. Southwards the landscape becomes more forbidding, and granite with occasional basalt outflows predominates. The Atouat plateau has a steep eastern escarpment, and it is succeeded southwards by the Ngoc Ang plateau which is slightly lower, but more rugged and extensive.

The whole border is subject to wet tropical climates with annual rainfalls between 2030 mm and 3050 mm (80–120 in.) and forest is general, although its nature varies with the underlying geology, being less dense on the limestone. Population densities throughout the area were low at the time the boundary was drawn, and the people were mainly ethnic minorities driven into these less attractive areas by stronger neighbours and the French. For example, near the Chinese border there were groups of Akha, and they were succeeded southwards by Tai, Meo and Kha groups. South of Dien Bien Phu the Tai groups predominated with enclaves of Meo peoples. On the granite plateaus such as Atouat there were Mon-Khmer groups of Gui, Sedang and Brao, with isolated groups of Khas. This must have been a fairly easy boundary to draw for the French officers; there was a clear linear upland zone with little apparent commercial value and with a low population density. Further the territories on both sides were French and therefore the bitter competition which sometimes accompanies boundary selection between two sovereign states was probably absent. However it is proper to say that the officers must have done their work carefully because the line has survived and there have been no reports that either side has challenged the boundary in the post-colonial period. There is just the chance that the boundary survived because the combatants in the post-colonial wars did not respect it. If the governments of Vietnam and Laos were ever on unfriendly terms it would not be difficult to find some sections of the alignment to dispute. For example, modern maps at a scale of 1:50 000, show that the boundary intersects the headwaters of several rivers flowing east or west, when a slight deviation would have made the boundary coincident with the watershed. It seems likely that the modern maps portray the drainage patterns more accurately than the old maps on which the boundaries were drawn.

Chhak, S. (1966). *Les frontières du Cambodge*. Paris.

104°
107°
A
B
C
1
2
3
20°
16°
0
50
100
150 Miles
0
50
100
150
200
250 Km.
C H I N A
CHINA
N O R T H
V I E T N A M
Sông Hông
(Red R.)
Sông Dà
(Black R.)
Pou Den Dinh
Dien Bien Phu
Hà Nôi
Hai Phòng
Nam Xeng
Xam
Nua
Phou
Loi
Sông Mã
Mekong
Louangphrabang
Xiangkhoang
Sông Ca
Loi Leng
Vinh
GULF
OF
TONKIN
HAI-NAN
TAO
L
A
O
S
Napè
Viangchan
(Vientiane)
Nong Khai
Udon Thani
Mekong (Mae nam Khong)
Dong Hoi
Quang Tri
Col
D'ai Lao
Huê
Savannakhét
Khemmarat
Atouat
Plateau
Saravan
T H A I L A N D
Ubon Ratchathani
Ngoc Ang
Plateau
Champasak
(Bassac)
Attapu
Xé Kong
S O U T H
V I E T N A M
Kontum
Krông Pokô
Col de Preah
Chambot
Don
Không
Siêmpang
Tônlé Rôpou
TONLE
ROPOU
PHUMI MLU
PREY
Tônlé Kông
Tônlé Srêpôk
Stoĕng Trêng
Siĕmréab
C A M B O D I A
Boĕng Tônlé Sab
Cao Nguyên Dăc Lăc
(Darlac Plateau)
Prêk Dak Dam
Lac Giao
(Ban Mê Thuot)
Poŭthisăt
Gulf of
Thailand

31 The Cambodia-Vietnam boundary

The boundary between these two countries was formed in the period 1869–1942. There were four distinct sections, which are shown on the opposite map, and their location and the timing of their formation reflect increasing French influence and interest in Indo China and neighbouring Cambodia.

The first section was formed due west of Sai Gon and close to it. This was a sensitive area for France because the presence of Cambodian and Vietnamese communities in the valleys of the Sai Gon, Vam Co Dong and Vam Co Tay rivers created disputes over sovereignty. The evolution of this boundary is described in the following pages. The sections north and south of this central segment were formed as France began to extend its authority throughout Cochin China, and began to exert strong pressure against Thailand in the Mekong valley.

The boundary north of the Cham river (marked C-D on the map) was constructed in the period 1871–1914. It extended the central section for a further 177 km (110 m) to the headwaters of the Hoyt river. This borderland becomes increasingly dissected northwards as levels rise to 460 m (1500 ft), and it was then heavily forested and lightly populated. The inhabitants were mainly Cambodians and Tamoun, Moi and Stieng groups who lived in well-fortified villages. In late 1871, a French official in Theu Dau Moi was instructed to report on the nature of the frontier between Cochin China and Cambodia in the west of this district. He replied that the area was only lightly populated but was a haven for brigands who captured cattle and people to be sold in Cambodia. This report did not result in any immediate claims to territory and the French boundary on maps was usually shown as proceeding due east from the pillar in the Chrum valley to Phnom Phu Den on the river Be. From this village the line swung towards the southeast and clearly included the districts of Cuu An and Thanh An, as well as the Moi region of Quan Loi.

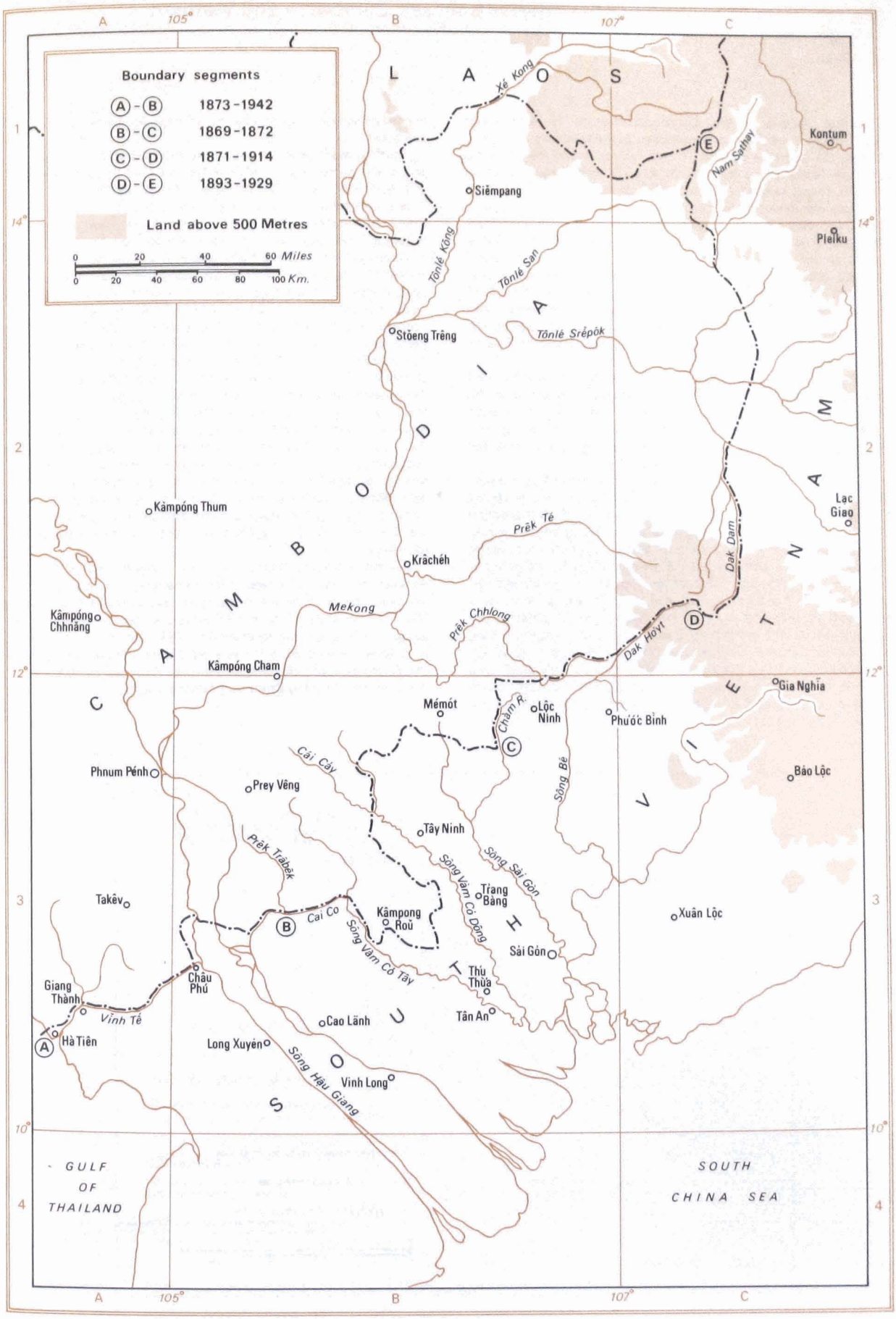
This cartographic annexation was confirmed and increased by decree in July 1893. This act 'reunited' the Cambodian area of Thanh An, the Cambodian-Tamoun district of Cuu An and the Moi cantons of Minh Ngai and Quan Loi, and the Stieng regions of Loc Ninh and Phuoc Le into a single administrative area known as Can Le. The term 'reunited' was not accurate since the area had never been politically unified in historical times, and it is interesting that as late as 1903 French maps sometimes showed the Stieng areas as 'Stieng annexes'. The decree revealed France's ambitions in this direction. The inhabitants of this new area were not to be taxed, but they did have to provide labour for building and maintaining the main road from Sai Gon to Kracheh on the Mekong river. Lagree and Garnier who had explored the Mekong valley in 1866–8, recommended that the area between Steong Treng and Siempang should be exploited for its timber, ivory, spices and precious metals. The road through the new province of Can Le was also one of the routes by which France began to exert pressure against Thailand in the Mekong valley. Only a month before the decree the governor of Cochin China had reported that the road was complete apart from some bridges, but that it was difficult to build the road in Cambodian territory because of the problem of obtaining labourers. The extension of French territory was one method of simplifying the problems of organizing work on the road. The unilateral extension of French territory caused widespread complaints from the Cambodians living in Can Le, from the Cambodian court and from the French Resident in Cambodia. Indeed the last-named official wrote that peace would be unlikely to return to the area unless the ancient boundaries of Cambodia were restored. The governor-general of Indo-China appointed a commission to enquire into the matter, but there were no positive results from its work.

This is not surprising for by that time the seeds of the final solution to the boundary problem had been literally sown in Sai Gon, Ong Yem and Nha Trang. Four species of rubber trees were planted in these areas on an experimental basis and *Hevea brasiliensis* began to show distinct promise. The tropical climate encouraged rapid growth and the longer dry period than in Malaya reduced the incidence of certain diseases. The best soils for rubber are the red soils which develop *in situ* through the decomposition of basalt and other igneous rocks. Such soils are located in an arc stretching from Thu Dau Moi through Loc Ninh to Kampong Cham and occupy an area of about 35 000 sq. km (13 000 sq. m). As the suitability of this area for rubber production became evident there were many applications to the government by individuals and companies for land. The administration was anxious to encourage such enterprise because of the revenue it would yield to the government, but, of course, it also involved responsibilities for providing basic services and keeping the peace. In December 1910 the governor-general of Indo-China appointed a commission to study the boundary question 'in view of the present interest in the extension of rubber cultivation in this region'. French officials from both Cochin China and Cambodia served on this commission which reported to the authorities in 1912. The recommendation of the commission was for a boundary mainly coincident with sections of three rivers: the Cham, the Chhlong and the Hoyt. These river sections were connected by a series of straight lines.

The section of boundary closest to the coast was drawn in 1873 by agreement between the king of Cambodia and the governor of Cochin China. The line extended for 209 km (130 m) across a low, level, alluvial plain which is seasonally inundated and drained by an intricate network of rivers and channels. This borderland was mainly occupied by Cambodians but the French invasion had prompted a number of Annamites to move into the area. This boundary segment, in common with all the others, favoured France at Cambodia's expense. The boundary proceeded almost due west from the confluence of the Cai Co and Trabek rivers to the Mekong and then on to the Song Hau Giang, it then swung southwards towards the Vinh Te canal which it followed to the Giang Thanh river, and then along that river to the sea west of Ha Tien. The boundary was principally identified with watercourses and generally the entire channel was placed under French control. There were minor alterations to this section which are described in the following pages.

The final section of boundary from the headwaters of the Dam valley to the tri-junction of Laos, Vietnam and Cambodia resulted from various French attempts to provide satisfactory pacification and administration of this area. From 1899 until 1904 the zone was governed by authorities in Laos but this was plainly unsatisfactory because of the much easier access from Annam. The transfer was duly made in 1904 and 1905, when the Dam river was selected as the boundary as far as the Tonle Srepok. North of the Srepok there was no convenient feature to carry the boundary, and when it was finally settled in 1929 it pursued an arbitrary course across the dissected forested landscape. Once again the boundary was drawn without any nice regard for Cambodian rights. A French officer investigated the claims by Annam to ownership of this area and he concluded that it was impossible to establish French or Annamite claims in this region (Chhak, 46–8). This report did not affect the final alignment of the boundary.

Chhak, S. (1966). *Les frontières du Cambodge*. Paris.


Boundary segments
A - B 1873 - 1942
B - C 1869 - 1872
C - D 1871 - 1914
D - E 1893 - 1929
Land above 500 Metres
0 20 40 60 Miles
0 20 40 60 80 100 Km.
LAOS
CAMBODIA
VIETNAM
SOUTH
Xé Kong
Nam Sathay
Kontum
Siëmpang
Plei Ku
Tônlé Kông
Tônlé San
Tônlé Srépôk
Stoèng Trêng
Kâmpóng Thum
Prêk Té
Dak Dam
Lac Giao
Krâchéh
Mekong
Prêk Chhlong
Dak Hoyt
Kâmpóng Chhnăng
Kâmpóng Cham
Gia Nghĩa
Mémót
Chàm R.
Lộc Ninh
Phước Bình
Cái Cây
Sông Bé
Phnum Pénh
Prey Vêng
Bảo Lộc
Tây Ninh
Prêk Trabèk
Sông Sài Gòn
Sông Vàm Cỏ Đông
Trảng Bàng
Takêv
Kâmpong Roû
Cai Co
Xuân Lộc
Sông Vàm Cỏ Tây
Sài Gòn
Thủ Thừa
Giang Thành
Châu Phú
Vĩnh Tế
Cao Lãnh
Tân An
Hà Tiên
Long Xuyên
Sông Hậu Giang
Vinh Long
GULF OF THAILAND
SOUTH CHINA SEA
A
B
C
D
E
105°
107°
1
2
3
4
10°
12°
14°

32 The 1870 and 1873 boundaries between Cambodia and Vietnam

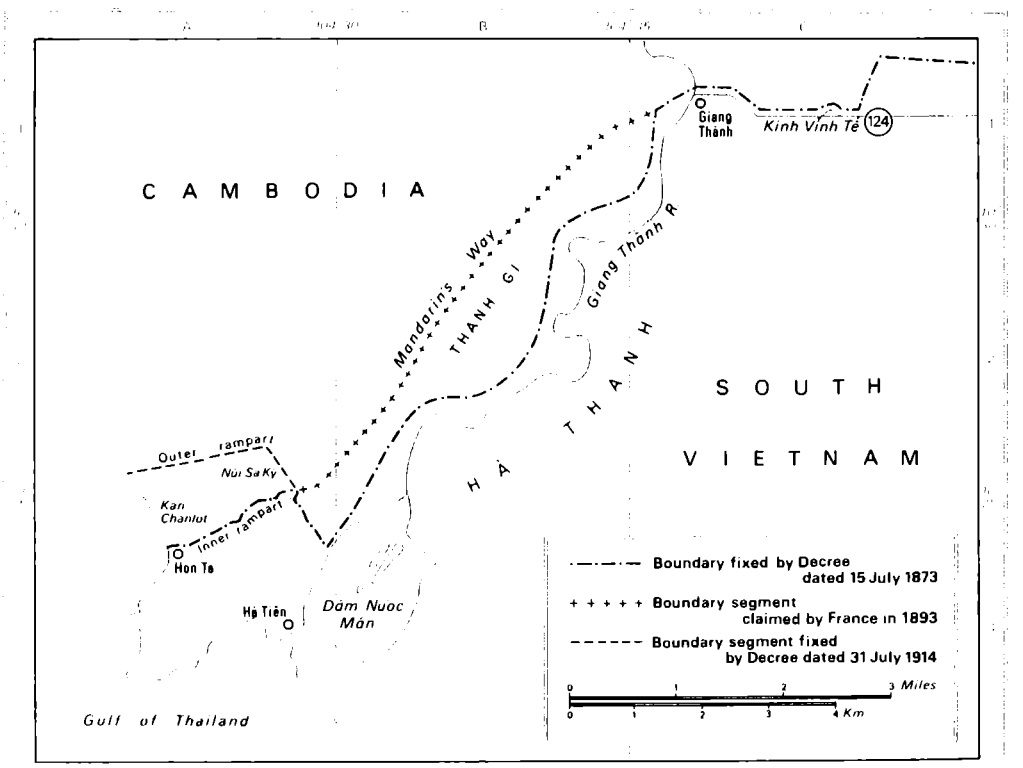
The first section of the Cambodia-Vietnam boundary was constructed by a Franco-Cambodian commission in 1870–71. During the previous decade France had extended its influence through Cochin China by the acquisition of strong points such as Tan An, Trang Bang and Tay Ninh. The country lying west of these outposts was swampy and heavily forested with communities of Annamite refugees occupying the river banks. The westward flight of these groups had displaced Cambodians from the riverine areas to the remoter interior sections. This transitional zone created problems for the French and Cambodian authorities, since its occupants could claim citizenship of either side as it suited them. The French commissioners had been furnished with descriptions of the line best suited to France's interests by the local French administrators, and the line drawn favoured France at every point.

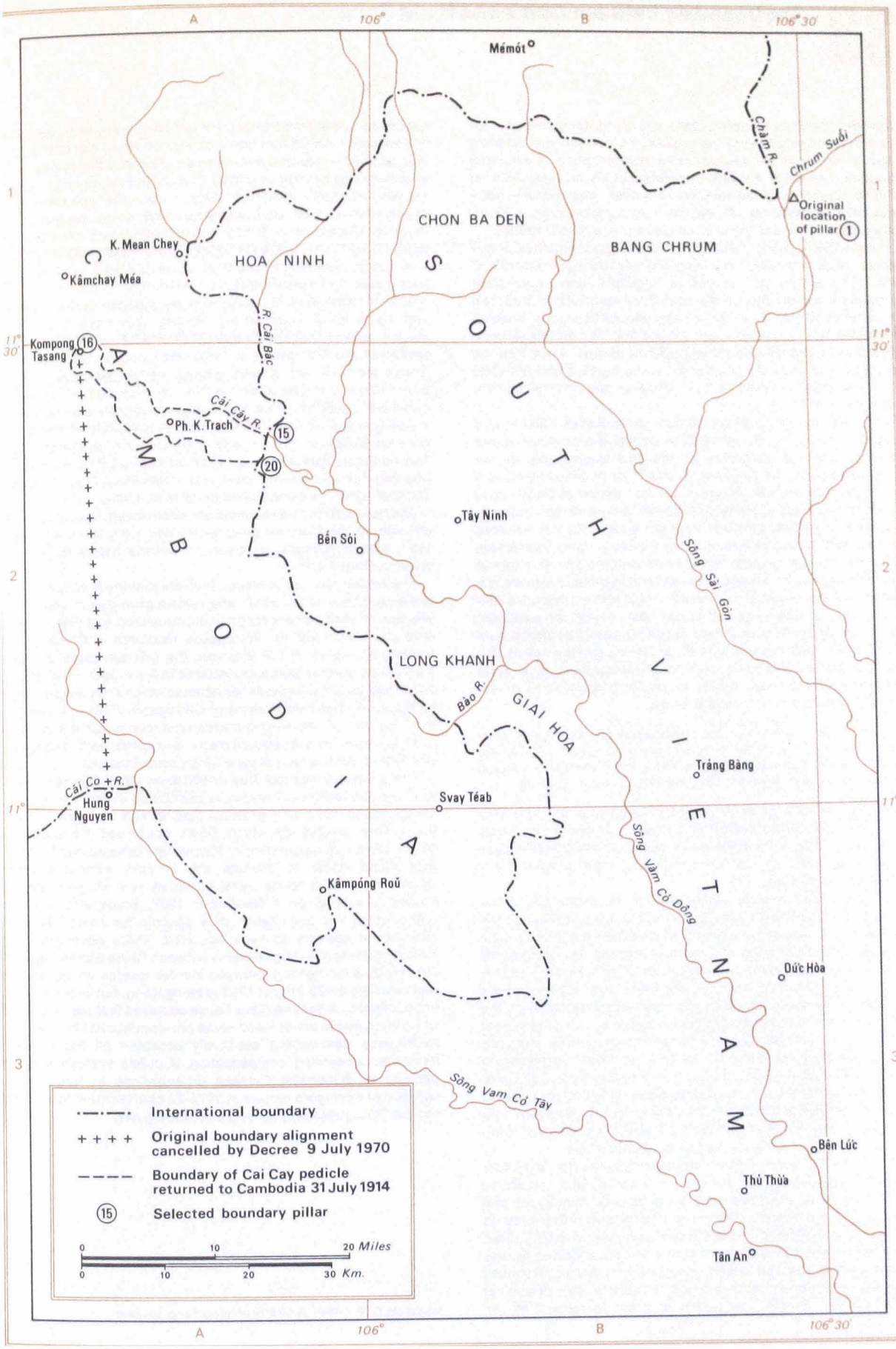
The boundary was first drawn west from the Cham valley and divested Cambodia of the provinces of Bang Chrum and Chon Ba Den. It then proceeded southwards along the Cai Bac before following the Cai Cay northwestwards to Kompong Tasang. The line was then drawn almost due south to Hung Nguyen near the confluence of the Cai Co and the Vam Co Tay.

When the Cambodian king saw the finished maps he protested at the loss of so much territory and his protest was evidently successful. A French decree was published in 1871 stipulating that the line between Kompong Tasang and Hung Nguyen would be cancelled and replaced by a line selected by French surveyors. The new line was designed to return to Cambodia those areas occupied by Cambodians while preserving for France territory on both banks of the Vam Co Tay and Vam Co Dong, which was occupied by Annamites. The French surveyors created the Cambodian salient containing Svay Teab and Kampong Rou, which at that time was known as 'the duck's beak', and which became known during the Vietnam war as 'the parrot's beak'. The new line left a curious French pedicle south of the Cai Cay ending at Kompong Tasang. That oddity was eliminated in 1914 when it was transferred to Cambodia in exchange for some territory near the coast.

The boundary near the coast was established on 15 July 1873, and it was demarcated in 1876. After following a course parallel to the Kinh Vinh Te as far as Giang Thanh the boundary swung south, and followed the telegraph line close to the Giang Thanh river until reaching the fortifications of Ha Tien, which were followed west and south to the coast at Hon Ta. In 1891 the governor of Cochin China published a map showing the boundary south of Giang Thanh following the Mandarin's Way, a more direct road to Hon Ta. Such a boundary transferred about 21 sq. km (8 sq. m) of marshy land to Cochin China. This area between the two roads was occupied by about fifty people producing about 111 hectares (275 acres) of rice. These farmers were mainly wealthy Annamites, living in Cochin China who had to pay taxes in Cambodia. The governor justified this cartographic aggression on the ground that the boundary had been mistakenly placed along the river road. In 1873, when the boundary was defined, the governor claimed that the telegraph line was along the Mandarin's Way, but due to Cambodian disturbances before demarcation occurred, it was shifted to the river road which was more easily defended, and it was there that the surveyors found it. A committee of inquiry appointed by the governor-general of Indo-China found that the telegraph line had been established along the river road in 1870 or 1871 and had not been subsequently removed.

However, Cochin China used the alleged loss of the area between the roads as a reason for demanding the cession of 8 sq. km (3 sq. m) lying between the inner and outer ramparts of Ha Tien. The boundary had been marked along the obvious inner walls in 1876 and confirmed by the 1896 commission of enquiry, but 294 Annamites lived in the area between these walls and the unobtrusive outer defences, and the cession was made to Cochin China in return for the Kompong Tasang pedicle.




A
106°
B
106° 30'
Mémót
Chàm R.
Chrum Suối
Original location of pillar (1)
CHON BA DEN
BANG CHRUM
K. Mean Chey
HOA NINH
Kâmchay Méa
R. Cái Bắc
Kompong Tasang (16)
Cái Cây R.
Ph. K. Trach
(15)
(20)
CAMBODIA
SOUTH VIETNAM
Tây Ninh
Bến Sói
Sông Sài Gòn
LONG KHANH
Bảo R.
GIAI HOA
Trảng Bàng
Cái Co R.
Hung Nguyen
Svay Téab
Kâmpóng Roŭ
Sông Vàm Cỏ Đông
Đức Hòa
Sông Vam Cỏ Tây
Bến Lức
Thủ Thừa
Tân An
11° 30'
11°
1
2
3
International boundary
Original boundary alignment cancelled by Decree 9 July 1970
Boundary of Cai Cay pedicle returned to Cambodia 31 July 1914
Selected boundary pillar
0 10 20 Miles
0 10 20 30 Km.

33 The boundary between China and Hong Kong

The land boundary between China and Hong Kong stretches for 29 km (18 m) between the bays called Hau hoi wan and Tai pang wan, which lie on the west and east respectively. It is extended along the high water marks of these bays, 55 km (34 m) to the west and 26 km (16 m) to the east. This boundary was settled in 1898 and 1899, when the New Territories were attached to Hong Kong, acquired in 1843, and the Kowloon peninsula secured in 1860.

Most of Hong Kong consists of rounded granite domes, which reach a maximum height of 915 m (3000 ft). The region was folded and tilted and these processes, together with subsequent weathering and changes in sea level, have combined to produced an indented peninsula surrounded by about 240 islands, of which the largest are Tai yue shan and Hong Kong. The granite uplands contrast with the fringing, level plains of alluvial origin, and the topography of parts of Hong Kong is being significantly altered by major cuttings for roads and the filling of bays to provide new lowlands.

The island of Hong Kong passed under British control as a result of the Opium War of 1840, when Palmerston summarized Britain's aims as 'satisfaction for the past and security for the future' (Endacott, 15). The security was to be provided by either a commercial treaty with China, or by the cession of an island of sufficient size and convenient location, where British subjects could be protected. Britain's blockade against Canton involved the occupation of some islands, including Hong Kong. Palmerston was unimpressed by Hong Kong; he considered it to be a barren island which would not become a centre of international trade, but when he was replaced by Peel in 1842 fresh instructions were sent to the British authorities requiring them to use the occupied islands as pawns in negotiations. Security was to be based on a commercial treaty and access to additional Chinese ports. Sir Henry Pottinger, who was in charge of the negotiations followed his instructions carefully, except for retaining Hong Kong, an act which he justified in the following terms:

> . . . every single hour I have passed in this superb country has convinced me of the necessity and desirability of our possessing such a settlement as emporium for our trade and a place from which Her Majesty's subjects in China may be alike protected and controlled (quoted in Endacott, 22).

On 29 August 1842 the island of Hong Kong was ceded to Britain in order that British subjects might have a port where they would store their goods, and careen and repair their ships; Britain took formal possession of the island 'and its dependencies' by a declaration on 26 June 1843.

In 1858 British military authorities on the island urged the acquisition of Kowloon on the grounds that it was useless to the Chinese but of considerable benefit to the British authorities in the exercise of police, sanitary and custom functions. The opportunity to acquire the area came two years later when a British minister failed in his attempt to travel up the Peiho river. British troops engaged in the hostilities which followed were assembled on the Kowloon peninsula, and it was decided by the British government that Kowloon would be accepted as part of the indemnity required from China. By a convention of 24 October 1860, the peninsula south of a line joining Kowloon fort on the east to a point opposite Stonecutters Island on the west, was ceded to Britain, in order to help maintain law and order in Hong Kong harbour. The new area measured 10 sq. km (4 sq. m) and the northern boundary of Hong Kong at that time is today marked by Boundary Street.

In the 1880s some British strategists called for a further northward advance of the boundary but the situation remained unchanged until the last few years of the century. After Japan had defeated China, France, Germany and Russia intervened to deprive Japan of some of the fruits of success. In return these countries received favours from China; Russia obtained railway concessions in Manchuria and occupied Port Arthur, Germany secured Kiaochow, and France acquired the lease of Kwangchowan. Britain now began to press in earnest for an extension of the area of Hong Kong and as early as 9 November 1894 specific claims had been marked on Admiralty charts. On 6 August 1898 a new convention was signed and the colony's new boundary was defined by a map. The shortest straight line joining the two bays was extended eastwards along the high water mark to meridian 114°30' east, and westwards along the high water mark to 113°52' east. These two meridians and latitude 22°9' north formed most of the remainder of the rectangular limits. The New Territories which added 919 sq. km (355 sq. m) to the colony were leased for ninety-nine years.

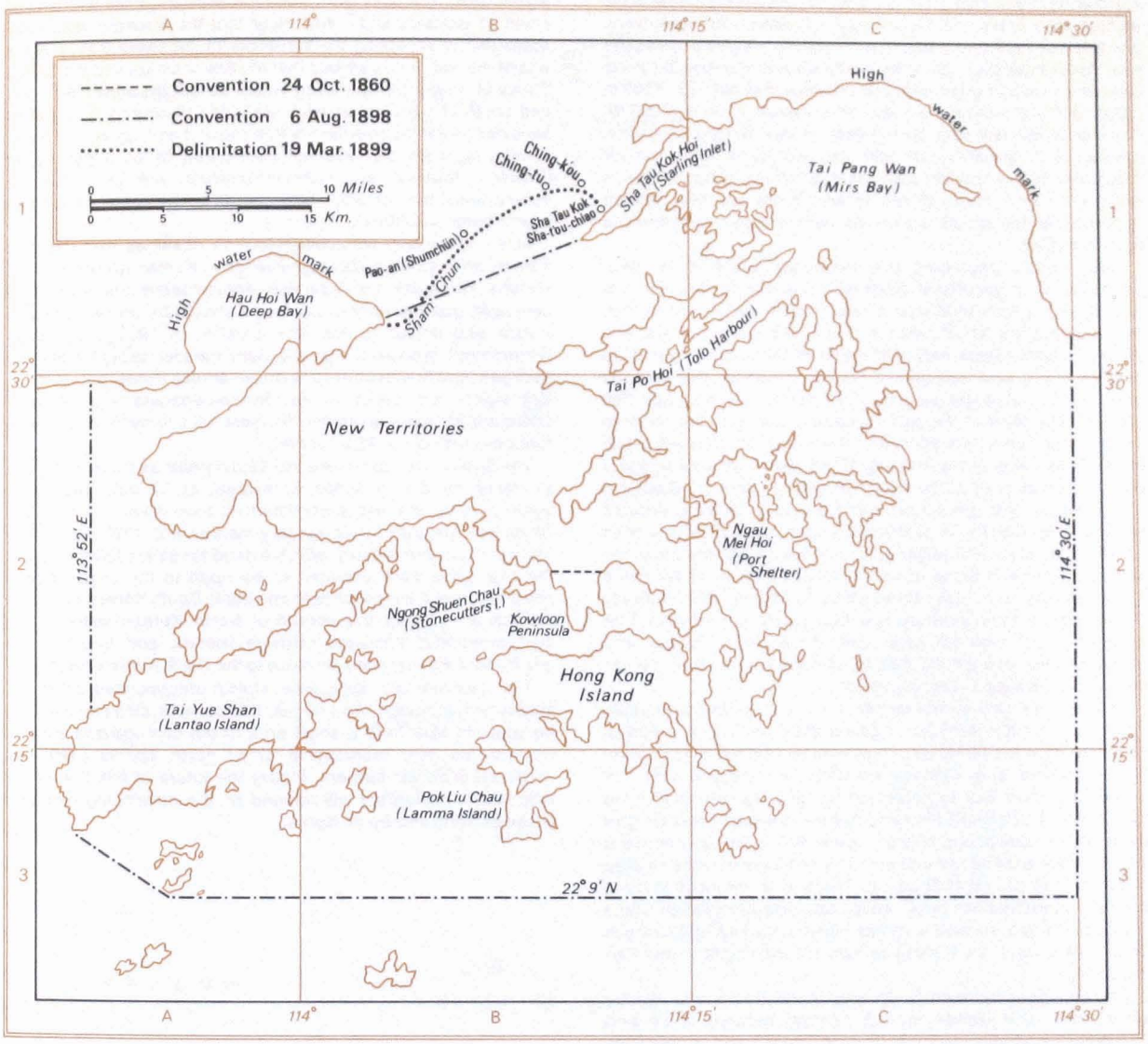
The northern land boundary was demarcated in the following year by J. H. S. Lockhart and Huang Tsun-hsin. These men quickly agreed that the Sham Chun should mark the western section of the boundary but there was disagreement about the course the boundary should follow from the headwaters of the Sham Chun to the head of the Sha Tau Kok Hoi. Finally it was proposed by Britain that the boundary should start from the village Sha Tau Kok and follow a small stream northwestwards to a low pass which led directly to the headwaters of the Sham Chun. This boundary was accepted but China refused Britain's claim to Sha Tau Kok and the boundary was drawn along the main street. The final agreement was signed on 19 March 1899.

The future of this international boundary clearly depends on the attitudes of the Chinese government when the lease expires in 1997, assuming there has been no change before then in the status of Hong Kong.

The official records of Macau indicate that the first Portuguese settlement occurred in 1557, when China gave permission for the erection of sheds where cargo could be stored and dried. At that time and until 1849 the Portuguese paid rent to China for the territory occupied, but in that year the Chinese customs house was closed and the port was declared independent. Much earlier a wall had been built across the isthmus which links the peninsula of Macau to the deltaic island of Chungshan. This wall which is only 274 m (300 yds) long is shown on a map published by Bellin in 1764 and on all subsequent maps, and some, both Portuguese and British, show a neutral zone lying north of the wall.

The boundary has not been defined in any published treaty, although the territory of Macau is mentioned in two agreements. On 26 March 1887, in a protocol dealing with trade and opium, there were articles by which China confirmed the perpetual government and occupation of Macau by Portugal, and Portugal guaranteed never to alienate the territory without Chinese agreement. These terms were repeated in a longer treaty of friendship signed on 1 December 1887, which also included reference to the delimitation of a specific boundary. No such delimitation appears to have occurred. There have been two major incidents affecting relations between China and Portugal. In July 1952, after fighting between border guards an agreement was reaching on 23 August 1952 in Hong Kong, but its terms were not published. A general disturbance occurred in December 1966 when Portuguese police killed some pro-communist Chinese. The Portuguese government eventually accepted all the Chinese demands concerning compensation, a public apology and the banning of Nationalist Chinese organizations in Macau. The collapse of Portugal's empire in 1974-75 confirms that Macau will remain Portuguese only so long as China agrees.

Endacott, G. B. (1958). *A history of Hong Kong*. London.


Convention 24 Oct. 1860
Convention 6 Aug. 1898
Delimitation 19 Mar. 1899
0 5 10 Miles
0 5 10 15 Km.
A
114°
B
114°15'
C
114°30'
1
2
3
22°30'
22°15'
High water mark
Hau Hoi Wan (Deep Bay)
Pao-an (Shumchun) O
Ching-kou O
Ching-tu O
Sha Tau Kok Hoi (Starling Inlet)
Sha Tau Kok
Sha-tou-chiao O
Sham Chun
Tai Pang Wan (Mirs Bay)
Tai Po Hoi (Tolo Harbour)
New Territories
113°52' E
114°30' E
Ngau Mei Hoi (Port Shelter)
Ngong Shuen Chau (Stonecutters I.)
Kowloon Peninsula
Hong Kong Island
Tai Yue Shan (Lantao Island)
Pok Liu Chau (Lamma Island)
22°9' N

34 Boundaries on the Korean peninsula

The boundary between North Korea and China measures 1416 km (880 m), and apart from 32 km (20 m) it coincides with the Yalu and Tumen rivers. These rivers flow respectively west and east from the watershed formed by Pai-t'ou Shan and Namp'ot' ae-san, and form an obvious divide between peninsula Korea and continental China. Hulbert (1: ch. 3 and 4) reports that some of the earliest political boundaries of Korea coincided with these rivers, and this is not surprising since they are well equipped to serve this role. Apart from their estuaries the rivers are bounded by steep cliffs which lead to sharp crests or plateaus at about 915–1525 m (3000–5000 ft), although some summits reach 2135 m (7000 ft). The tributaries have also carved deep valleys into the crystalline granites and gneisses, so that the landscape from the air resembles gale-swept seas. Coniferous forests of larch, spruce and pine cover much of the terrain; there are only limited opportunities for agriculture on the narrow valley floor and the wider estuaries.

The treaties governing this boundary which have been published were concluded between China and Japan. The first was signed in April 1895 after a nine months' war which resulted from competition for influence in Korea. Japan won the war and secured China's agreement to the independence of Korea and the cession of the southern part of Fentien province. This was the area on the Liaotung peninsula occupied by Japanese troops. The southern boundary of the ceded area, and therefore the northern boundary of Korea, was defined by the course of the Yalu from its mouth to its tributary the An-ping. There was no stipulation about how the boundary would be drawn along the river or the allocation of any islands. The great powers of the time objected to Japan's expansion at China's expense and Japan retroceded the area north of the Yalu in November 1895, and once again the boundary between China and Korea was confirmed as the Yalu as far as the An-ping confluence. The Yalu was also mentioned as a boundary river in a treaty between China and Japan in November 1911. This document dealt with rail traffic over the Tan-tung bridge, and stated that 'the centre of the Yalu iron bridge shall be regarded as the frontier between the two countries'.

The Tumen river was first mentioned in a Sino-Japanese treaty in September 1909, although of course the Sino-Russian treaty of 1860 had fixed the terminus of the boundary on the river Tumen. The Japanese and Chinese texts both indicated that the signatories undertook to 'recognise the river Tumen as forming the boundary between China and Korea'. However the texts give contradictory definitions of the source of the Tumen and each allows a different line to be drawn. The two lines enclose an area of about 1165 sq. km (450 sq. m). There is no evidence that the differing interpretations have caused any dispute between China and Korea, and a Chinese atlas examined in the Peking Library in April 1974 showed the Korean version of the boundary near Pai-t'ou Shan.

The boundary between North and South Korea is a military demarcation line similar to that existing between India and Pakistan in Kashmir, and the division which used to separate North and South Vietnam. It stretches for 241 km (150 m) across the Korean peninsula trending northeast-southwest across the 38th Parallel, which is intersected close to the west coast. Except in the west this line traverses rough mountain country of the southern Taihaku Sammyaku, which has isolated peaks over 1700 m (5550 ft). The climate possesses a severe winter of about four months, and the natural vegetation is coniferous forest of larch and spruce with some deciduous oaks and maple. Cleared slopes often become eroded and remain barren, and cultivation is usually confined to small areas on the valley floors. The shorter western borderland contains low foothills and alluvial plains, and these more favourable topographical circumstances, allied to a climate with a short winter and a hot to warm summer, provide better opportunities for cultivation. Population densities in this area are higher than corresponding areas in the eastern sector.

This boundary resulted first from the arrangements made at the end of World War II and then from the armistice at the end of the Korean war. The Soviet Union declared war against Japan on 8 August 1945, and Russian troops landed on the east coast of Japanese-occupied Korea at Unggi and Najin, close to Vladivostok, four days later. Soon the Russian forces also landed south of Wonsan, and it was clear that the Russians must play some role in accepting the surrender of Japanese troops at the end of the war. It was agreed that the Soviet Union and the United States of America respectively would accept the surrender north and south of the 38th parallel. McCune (1949) and Grey (1951) have described the selection of this line and both agree that it was chosen in haste and was not considered to be a permanent division. However, as relations between the two countries deteriorated the parallel took on the character of a rigid international boundary.

In an interesting reference McCune observes that the 38th parallel enjoyed an earlier significance in Korean history. In 1896 Marshal Yamagata, the Japanese representative in Moscow, had proposed that the Korean peninsula should be divided between Russia and Japan by the 38th parallel. In 1903 the Russian Government proposed that the 39th parallel should mark the southern limit of a neutral zone drawn across Korea; and in 1904, just before the onset of the Russo-Japanese war, Russian commanders were instructed to meet with force any Japanese advance north of the 38th parallel.

The Korean war confirmed the 38th parallel as the dividing line in Korea by the armistice agreement of 27 July 1953. The agreement constructed a demilitarized zone 4 km (2.4 m) wide, which was bisected by a boundary marked with 1292 pillars. The waters of the Han Estuary, which extend for 61 km (38 m) west of the final pillar were declared to be open to the ships of both countries where they each held one bank. South Korean islands in the estuary restrict the access of North Korean vessels. The agreement also allocated offshore islands, and South Korea secured the Paengnyong-do close to the North Korean coast.

The demilitarized zone was almost depopulated after the agreement, although two villages, one on each side continued to be used. In May 1956 a small area of the demilitarized zone in North Korea, near Taeryong-Ni (37°51' north, 126°39' east), was made available for farmers. Plainly the future of this line as an international boundary will depend on the developing relations between North and South Korea.

Hulbert, H. B. (1962). *History of Korea* (ed. C. N. Weems), 2 vols, London.
Grey, A. L. (1951). The thirty-eighth parallel. *Foreign Affairs*, 29: 482–7.
McCune, S. (1949). The thirty-eighth parallel in Korea. *World Politics*, *1:223–32.*


A
126°
B
130°
C
0 50 100 150 Miles
0 50 100 150 200 Km.
C H I N A
U. S. S. R.
Vladivostok
Hun-ch'un
Tumen R.
Fu-sung
Paektu-san (Pai-t'ou Shan)
Fu-shun-ch'eng
Lin-chiang
Namp'ot'ae-san
Ch'ongjin
Pen-ch'i
Hun-chiang
Yalu R.
Ch'osan-üp
Namdae-ch'on
NORTH KOREA
Tan-tung
Sinŭiju
Ch'ongch'ŏn-gang
Hamhŭng
SEA OF JAPAN
P'yŏngyang
Sariwŏn
Kuŭm-ni
Pokkye-ri
Kansŏng
Kaesŏng
P'anmunjŏm
Paengnyŏng-do
Sŏul
Inchŏn
SOUTH KOREA
Taejŏn
YELLOW SEA
Taegu
Masan
Pusan
Mokpo
JAPAN
42°
38°
34°
1
2
3

35 The boundary between India and Sri Lanka

On 8 July 1974 a new boundary came into force between India and Sri Lanka. It had been agreed during talks held in the previous month, and it separated the waters, islands and continental shelf which belonged to each country in Palk strait.

Palk strait has the characteristics of a shallow bay enclosed between the Indian coast and the northern coast of Sri Lanka. It measures about seventy nautical miles along its north-south axis and about sixty-five nautical miles along its east-west axis. There are more than a dozen islands in the strait, situated in the eastern sector close to the coast of Sri Lanka. The southern end of the strait is almost completely closed by a line of large and small islands, known collectively as Adams Bridge. This feature consists of two large islands, Pamban and Mannar, which are respectively close to India and Sri Lanka, and about a score of small islands, which occupy the central zone. There are two navigable channels through Adams Bridge. The most important lies between the Indian coast and Pamban Island. It is located in a causeway which carries the railway from the mainland to the island, and will allow the passage of vessels which do not have a greater displacement than 800 tons. The navigable channel between Mannar Island and Sri Lanka passes under the span of the railway bridge carrying the railway from the mainland to the island. The channels between the small islands are rarely more than one metre (3 ft) deep, and the facts that they are subject to silting, strong currents and confused seas at different seasons make them very dangerous waters. A regular ferry service connects the two rail systems. The small islands consist of calcareous sandstones and it is believed they are similar in formation to the *paars* which make up much of the floor of Palk strait. *Paars* are hard, rocky areas of sea floor which form ideal environments for oysters and chanks, two of the shellfish which are prized in this area. Between the *paars* on the sea floor there are patches of sand, locally called *puchi Manal,* and in these areas abound sea worms on which the chanks thrive. South of Adams Bridge lies the gulf of Mannar, and the northern waters of this gulf have similar bottom formations to Palk strait, and are also excellent fishing grounds for oysters and chank.

The oysters in these waters yield pearls of excellent quality and these precious stones have been collected for thousands of years. Pliny, writing in the first century, referred to Sri Lanka as 'the most productive of pearls of all parts of the world'. Chanks, which belong to the genus *Turbinella,* produce a large shell which has an important religious significance in the worship of Vishnu. The shells may be used as trumpets in the temples, or as vessels for pouring out libations, or, after being cut, as bracelets and ornaments.

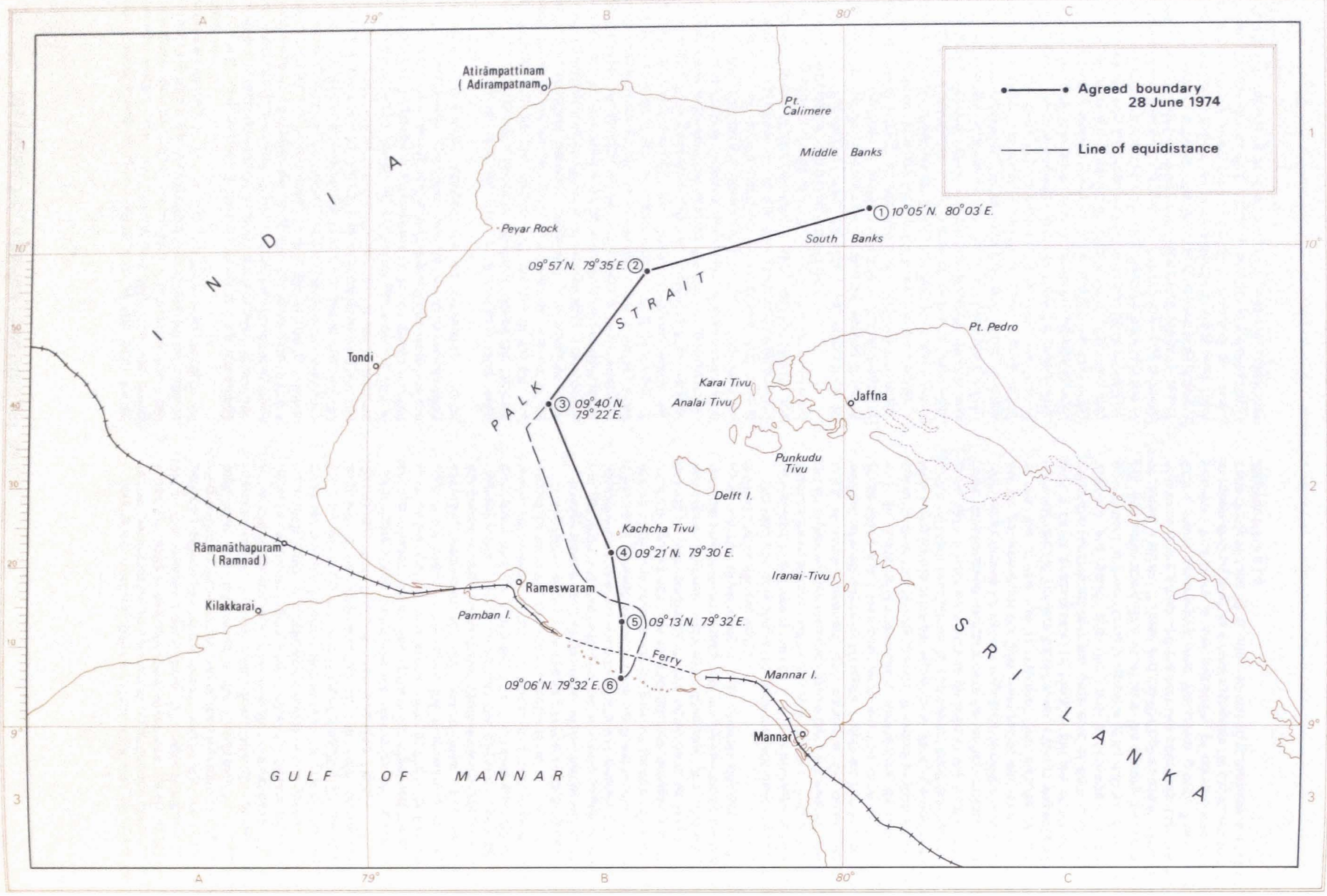
The agreement of 1974 referred to the division of historic waters. The conventions on the law of the sea have recognized that some bays and waters have a quite special relationship with the contiguous land, and should be excepted from the general rules about measuring territorial seas or deciding whether bays may be closed by straight lines. Unfortunately such historic features are not closely defined, although it is usually assumed that such areas of the sea will have been exclusively used by the state concerned for a long time without any challenge by other countries. Thus Hudson Bay is considered to be an historic bay of Canada, while the gulf of Carpentaria could not be considered an Australian historic bay.

India and Sri Lanka have good grounds for considering Palk strait and the northern sector of the gulf of Mannar as historic waters. First, there is the fact that local fishermen have used the waters for thousands of years, and second, there is the fact that this use has not been challenged by other states. There is also the additional ground that during legal proceedings in 1903–4 the Madras High Court held that the waters were part of 'His Majesty's dominions'. The case concerned a man who had been allegedly poaching oysters from beds leased by the rajah of Ramnad five nautical miles off the coast. The magistrate who first tried the case found him not guilty on the ground that these beds were under the high seas. The Chief Justice of Madras gave a contrary opinion when the matter was brought to his notice, and certainly there had been a British colonial act of 1811 prohibiting any unauthorized person from fishing 'or hovering' near pearl beds. However, there was plainly some doubts and an inquiry was held by three judges. They first of all cleared up the confusion of the earlier proceedings when it was considered that the beds were in the gulf of Mannar; they were actually in Palk strait. The judges had no hesitation in finding that Palk strait was not part of the normal sea because it was 'landlocked by His Majesty's dominions for eight-ninths of its circumference', and because it had been 'effectively occupied for centuries by the inhabitants of the adjacent districts of India and Ceylon' (Jessup, 14–16). The judges also confirmed that if the case had concerned Mannar gulf their decision would have been the same.

The rules for dividing a shared area of water or continental shelf refer firstly to mutual agreement and then stipulate that, failing agreement, neither side is entitled to extend its authority beyond a line of equidistance. This is a unique line which at every point is equidistant from the nearest points of the states of each country. The first three points on the boundary selected in June 1974 lie on or very close to the line of equidistance. As the map opposite shows the continuation of the boundary through points 4 and 5 does not correspond with the line of equidistance. The boundary lies much closer to the island of Kachcha which was awarded to Sri Lanka, than to the corresponding nearest Indian territory. The reasons for this deviation can only be guessed. It is likely that the agreed boundary is one which is easier to administer than the line of equidistance, and it will be simpler for fishermen to identify the national limits. The agreement also refers to the rights of Indian fishermen and pilgrims to visit Kachcha Tivu and notes that these rights will continue and that such persons will not be required to obtain travel documents for such visits. It seems as though Sri Lanka gained Kachcha Tivu, over which there had been some disagreement, but that it did not secure the total area of sea and continental shelf which ownership of the island would normally confer. The agreement also stipulated that if any deposits such as petroleum, natural gas, sand and gravel were located astride the boundary, both countries would hold discussions to determine the proper way to exploit the resource and allocate revenue derived from it.

It is surprising that the two states did not continue the boundary across the shallow shelf of the gulf of Mannar, for this is a determination which should not provide any difficulties. Presumably the boundary will be so extended in the near future.

Jessup, P. C. (1927). *The law of territorial waters and maritime jurisdiction.* New York.


Agreed boundary
28 June 1974
Line of equidistance
Atirāmpattinam
(Adirampatnam)
Pt.
Calimere
Middle Banks
South Banks
Peyar Rock
1 10°05′N. 80°03′E.
09°57′N. 79°35′E. 2
3 09°40′N.
79°22′E.
4 09°21′N. 79°30′E.
5 09°13′N. 79°32′E.
09°06′N. 79°32′E. 6
PALK STRAIT
INDIA
Tondi
Pt. Pedro
Karai Tivu
Analai Tivu
Jaffna
Punkudu
Tivu
Delft I.
Kachcha Tivu
Iranai-Tivu
Rāmanāthapuram
(Ramnad)
Kilakkarai
Rameswaram
Pamban I.
Ferry
Mannar I.
Mannar
SRI LANKA
GULF OF MANNAR

36 Maritime boundaries in southeast Asia

Since 1958 a web of maritime boundaries has been traced through some of the seas of southeast Asia. The web is still incomplete but the pace of boundary construction has been quickening, and it can be expected that efforts will be made by interested parties to secure firm maritime limits as soon as possible.

The first maritime limits in the current series were proclaimed by Britain in respect of the offshore divisions between Brunei and Sarawak and Brunei and Sabah. These two boundaries were proclaimed on 11 September 1958 and they each extend to the 100 fathom isobath. This depth is close to 200 m (650 ft), which is the depth specified in the 1958 convention on the continental shelf as one of the measures of the edge of national claims. The boundary with Sarawak is thirty-four nautical miles long and the seaward section seems to favour Brunei. The terminus is about ten nautical miles west of the equivalent point on the line of equidistance. The boundary between Brunei and Sabah is about eighty nautical miles long and approximates fairly closely to the line of equidistance. It is not clear whether these unilateral British boundaries have been accepted by the independent states concerned.

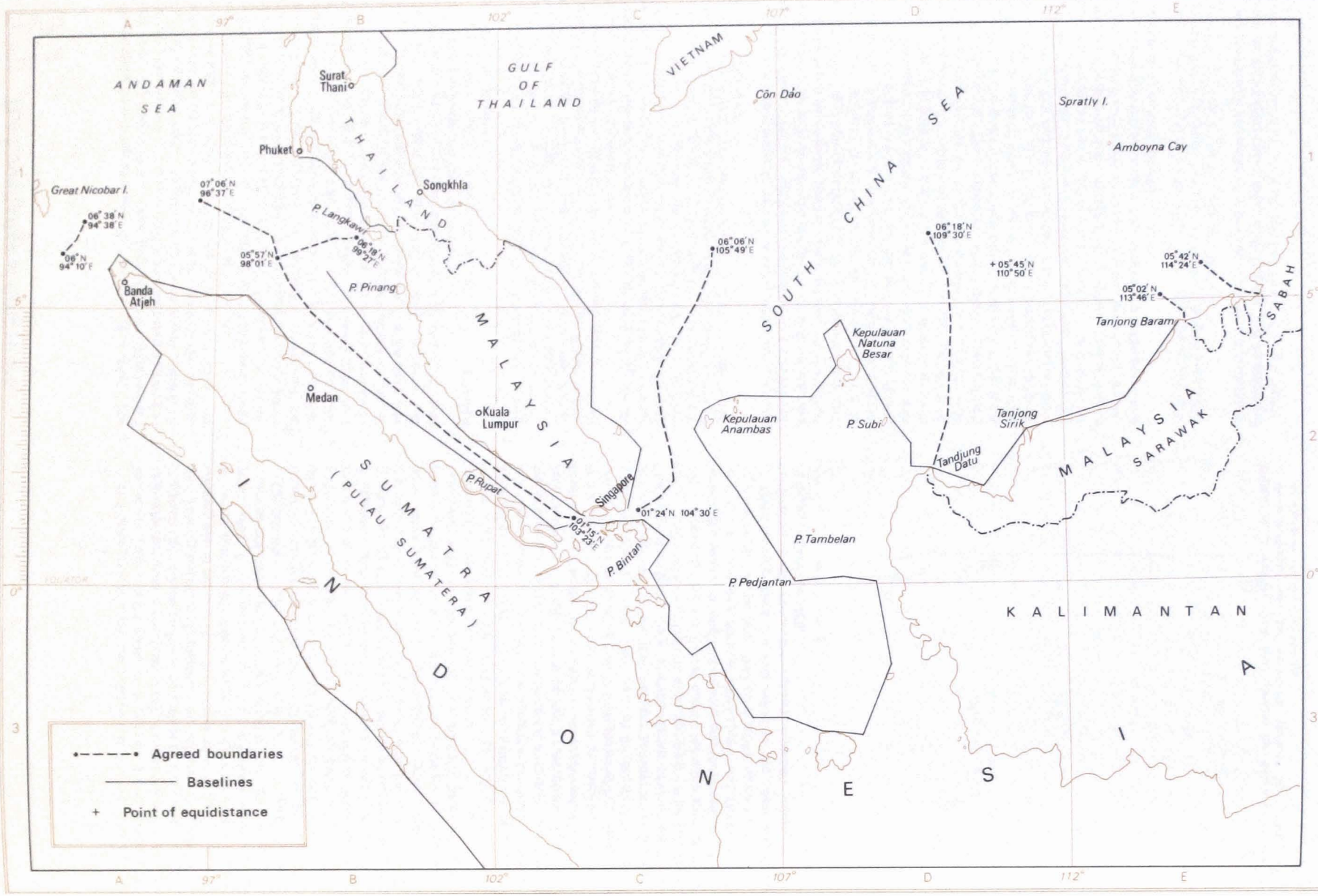
The next development occurred on 18 February 1960, when Indonesia proclaimed a series of baselines around the national archipelago. The 1958 conventions on the law of the sea had made provision for the use of straight baselines, but not in the Indonesian situation. However, since that time baselines have been proclaimed around a number of archipelagos, including the Philippines, Fiji, the Maldives, the Faeroes and the Galapagos islands. The archipelagic states are pressing this concept in current conferences on the law of the sea, and it is unlikely to be resisted providing there are guarantees about the right of innocent passage through the waters contained within the archipelagos. The Indonesian baseline measures 8167 nautical miles and encloses seas totalling about 666 000 sq. nautical miles; Indonesia's claim to a territorial sea twelve nautical miles wide outside its baseline means that a further 98 000 sq. nautical miles are added to the waters controlled by Indonesia. The longest segment of baseline is across the Molucca passage and measures about 120 nautical miles. Presumably the break in the baseline caused by Portuguese Timor will now be eliminated following that area's incorporation into Indonesia.

The first negotiated maritime boundary was settled on 27 October 1969 when Indonesia and Malaysia agreed to three segments of continental shelf boundaries. These separated sovereign claims in the strait of Malacca and the South China sea. To place itself on an equal footing Malaysia had proclaimed a series of straight baselines on 2 August 1969, although most of the segments were not appropriate in terms of the 1958 conventions. The boundary through the Malacca strait is 400 nautical miles long and follows the line of equidistance between the two sets of baselines. The boundary between West Malaysia and the Indonesian islands of Anambas and Natuna Besar is 310 nautical miles long and scrupulously follows the line of equidistance. The last boundary extends from Tandjung Datu, which is the western terminus of the Malaysian-Indonesian land boundary on the island of Borneo, for about 270 nautical miles between Sarawak and Kepulauan Natuna Besar. This line only follows the line of equidistance for the first fifty nautical miles from land. Thereafter the boundary steadily diverges from the line of equidistance in Malaysia's favour, so that the terminus is about eighty nautical miles northwest of the equidistant terminus at 5°45' north and 11°50' east. This last identified point is equidistant from the closest Indonesian and Malaysian areas and from Spratly Island, the ownership of which is disputed by China, Vietnam, Taiwan and the Philippines. It has not proved possible to establish why Indonesia agreed to such a generous settlement with Malaysia.

The good relations between Indonesia and Malaysia were further confirmed by an agreement regarding the delimitation of territorial waters in Malacca strait, which was signed on 17 March 1970. This boundary was about 175 nautical miles long and generally coincided with the eastern segment of the continental shelf boundary. However, for some obscure reason a tiny sliver of high seas was left between the Indonesian and Malaysian territorial waters. This triangular oddity has a base of two nautical miles and a longest side of thirty-eight nautical miles. The next development concerned the northern end of Malacca strait. On 12 June 1970 Thailand proclaimed a series of straight baselines for three segments of its coast; two were in the gulf of Thailand and the third was along the west Thai coast south of Phuket. This last segment is probably justified by the 1958 conventions. In December 1971 Thailand, Indonesia and Malaysia concluded agreements which completed the dissection of the continental shelf of Malacca strait. The agreements identified the common point on the boundaries of each country as 5°57' north and 98°01' east. From this common point the Indonesian-Thai boundary extended westwards for 120 nautical miles; the Indonesian-Malaysian boundary was drawn southeastwards for seventy-five nautical miles to connect up with the origin of the 1969 shelf boundary; and the Malaysian-Thai boundary was drawn eastwards for ninety-five nautical miles, to a point where it intersected the territorial waters of both countries.

In May 1973 Indonesia reached agreement with Singapore on a boundary separating their territorial seas in Singapore strait, and this agreement is discussed on the following pages. The latest agreement in this area concerned India and Indonesia. They drew a boundary between Sumatera and the Great Nicobar island on 8 August 1974. This boundary is forty-seven nautical miles long and carefully follows the line of equidistance between the various islands of both countries. In this agreement, as well as those concluded between Indonesia, Malaysia and Thailand, the sensible provision was made that the parties would consult and agree on the exploitation of any mineral deposit which was located astride the boundary.

The map opposite shows the gaps that still exist in the web of boundaries. First there is the connection to be made between the Indonesian boundaries with India and Thailand. This is probably not an urgent matter because these waters are over 500 fathoms deep. A more important gap concerns the outer limits of continental shelf claims by Malaysia, Indonesia and Brunei in the South China sea. These outer limits must be forged with Vietnam and the state which eventually establishes its uncontested authority over the Spratly islands. It seems probable that it will take a long time to solve these problems. When the government of South Vietnam proclaimed its continental shelf boundaries on 9 June 1971 it claimed a very large area in the South China sea closer to Indonesian islands than to the territory of South Vietnam. Indonesia pressed for serious negotiations on the disputed area, but the government in Sai Gon preferred to wait for the outcome of the law of the sea conference. The attitude of the new administration in Vietnam is not known, either in respect of former claims by its predecessor, or towards the law of the sea. It is generally considered that the prospects of finding oilfields off Vietnam are good and this may encourage the present government to reach speedy agreement so that exploration can proceed unhindered. The situation in the Spratly islands is very confused. Vietnam, Taiwan and the Philippines are in possession of islands in the group and the first two countries, together with China, claim sovereignty over the entire group. There is no evidence that there is any possibility of compromise on this question and so long as China maintains its claim, which it did quite firmly in June 1976, international oil companies are likely to stay out of the area.


ANDAMAN SEA
GULF OF THAILAND
VIETNAM
Côn Đảo
Spratly I.
SOUTH CHINA SEA
Amboyna Cay
Great Nicobar I.
Surat Thani
Phuket
Songkhla
THAILAND
P. Langkawi
P. Pinang
Banda Atjeh
Medan
Kuala Lumpur
MALAYSIA
SUMATRA (PULAU SUMATERA)
P. Rupat
Singapore
P. Bintan
P. Tambelan
P. Pedjantan
Kepulauan Natuna Besar
Kepulauan Anambas
P. Subi
Tanjung Datu
Tanjong Sirik
Tanjong Baram
SABAH
MALAYSIA SARAWAK
KALIMANTAN
INDONESIA
07°06'N 96°37'E
06°38'N 94°38'E
06°N 94°10'E
05°57'N 98°01'E
06°18'N 99°27'E
06°06'N 105°49'E
06°18'N 109°30'E
+05°45'N 110°50'E
05°42'N 114°24'E
05°02'N 113°46'E
01°24'N 104°30'E
01°15'N 103°23'E
Agreed boundaries
Baselines
+ Point of equidistance

37 The boundaries of Singapore

The boundaries of Singapore were developed in three stages. The first stage occurred in 1820–4 when Anglo-Dutch negotiations left Britain in command of the island. The second stage occurred in 1927 when the British authorities made a unilateral declaration concerning the boundary between Singapore and British Malaya. The final stage took place in 1973 when Indonesia and Singapore agreed on a boundary separating their territorial seas.

Singapore consists of the main island and about two dozen small islands, which together have an area of 588 sq. km (227 sq. m). It is separated from Malaysia by the Johore strait which varies in width from 1–3 km (less than 2 m). Singapore is located at the eastern end of the Malacca strait which was a prime theatre of Anglo-Dutch rivalry at the beginning of the nineteenth century. The best account of this rivalry is provided by Marks (1959), and his analysis makes it clear that Britain's prime concern was to secure uninterrupted access to the strait, while Holland's principal aim was to exclude Britain from the islands south of the strait. It is clear that these intentions were not mutually exclusive and accordingly much of the time spent negotiating was concerned with trade and finance rather than territory.

The governor-general of India instructed Sir Stamford Raffles in the following terms.

> The proceedings of the Dutch Authorities in the Eastern States . . . leave no doubt that it is their policy, by possessing themselves of all the most commanding stations in that quarter, to extend their supremacy over the whole Archipelago. The success of this project would have the effect of completely excluding our shipping from the trade with the Eastern Islands . . . and would give them entire command of the only channels for the direct trade between Europe and China . . .
> Under these impressions it appears to the Governor-General in Council to be the object of essential importance to our political and commercial interests to secure the free passage of the Straits of Malacca, the only channel left to us . . . but the most material point to obtain, and that which will indeed constitute the only effectual means of accomplishing the object of securing a free passage, is the establishment of a station beyond Malacca, such as may command the southern entrance of those Straits (quoted in Marks, 31).

The instructions continued by recommending the port of Rhio, but the Dutch were in secure occupation of that station and Raffles fixed on Singapore. By agreement with the local sultan on 26 June 1819, Britain was granted control over an area on the island bounded by the coast between points Malong and Katong, and extending inland as far 'as the range of a cannon shot'. This is an unusual way of defining a land boundary, although it was used in claiming some early maritime limits. This new British acquisition was challenged by the Dutch authorities, but the challenge was resisted and Singapore provided the stimulation for a general rationalization of the muddle of British and Dutch possessions in India and the Malacca strait. On 17 March 1824 a treaty was signed between the two countries giving Britain various Dutch stations in India and the town and fort of Melaka on the north shore of the Malacca strait in return for the cession of various depots on Sumatera. The Dutch withdrew objections to Britain's occupation of Singapore in return for British recognition of their position in Belitung, and finally Britain agreed that it would not seek new territories on Sumatera while the Dutch made a similar disclaimer regarding the mainland. This means that while no precise maritime boundary was drawn the two sides identified the islands which belonged to each. It is interesting that the Dutch had a poor opinion of the value of Singapore.

> As a produce-yielding territory Singapore has no value. Such value as it may have as a naval station and as a transfer point between Bengal and China is . . . appraised far too high (quoted in Marks, 173).

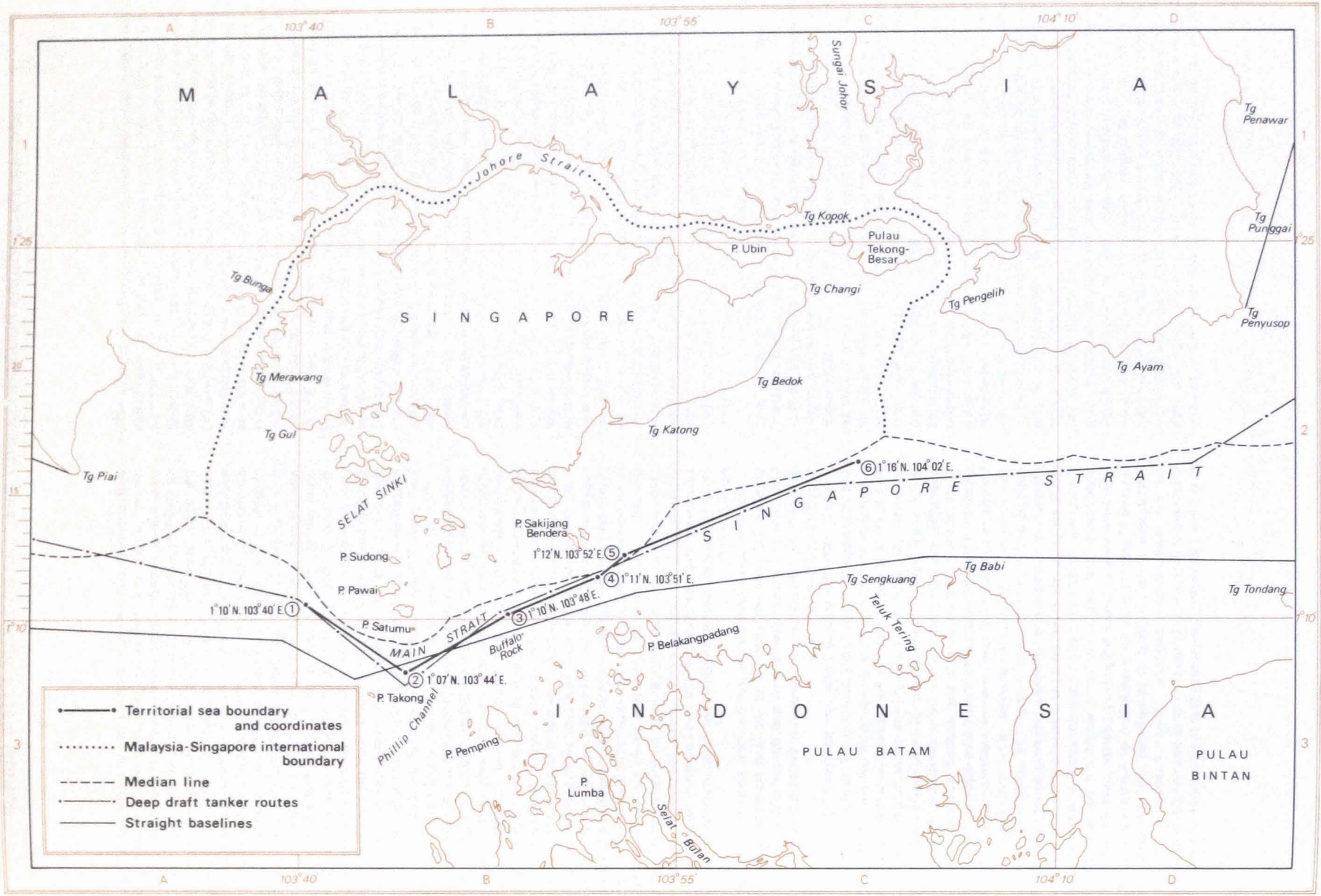
A new treaty with the sultan of Johore on 2 August 1824 enabled Britain to acquire the entire island of Singapore and its adjacent islets within a radius of 'ten geographical miles' (16 km) from the coast.

The British government retroceded some of the islets and half the Johore strait to the sultan of Johore on 3 August 1924. This unilateral act drew a boundary along the deep water channel of the strait, and allocated the major islets of Ubin, Tekong-Besar and Tekong Kechil to Singapore. The act also provided for the continuation of the boundary at the extremities of the Johore strait to the edge of the territorial seas, which were then three nautical miles wide. It was stipulated that if the deep water channel changed its location the boundary would follow that change.

On 25 May 1973 Indonesia and Singapore agreed on a boundary separating their territorial waters in the Singapore strait. The boundary, which is twenty-four nautical miles long is defined by six points. As the map opposite shows, only points 4, 5 and 6 are on or very close to the median line, which is the line equidistant from the coast of Singapore and the baseline proclaimed by Indonesia in 1960. It will be noticed however that the boundary corresponds fairly closely with the course used by large oil-tankers in passing through the strait. One unusual feature of this boundary is the fact that point 2 is located on the landward side of the Indonesian straight baseline, which represents a concession by that country.

The map also indicates that there are still some maritime boundaries to be drawn to complete the division of these waters and the underlying shelf. First the agreement between Indonesia and Singapore only refers to the territorial waters, it does not deal with the continental shelf. It is tempting to assume that the present boundary will also be made to apply to the continental shelf, but it is not certain that Indonesia would wish to concede an area of sea-bed, however small, within its straight baselines. Second the boundary west of point 1 will have to be drawn first between Indonesia and Singapore, then between Indonesia and Malaysia. The map shows that if this westward extension follows the median line an entire section of the channel used by giant tankers will fall within Indonesian waters. East of point 6 there is a short section of boundary needed between Singapore and Indonesia to carry the line to the boundary between Singapore and Malaysia as it emerges from Johore strait. Beyond that tri-junction there is a gap of about twenty-seven nautical miles to the beginning of the continental shelf boundary agreed between Indonesia and Malaysia in October 1969.

Marks, H. J. (1959). 'The first contest for Singapore 1819–24', *Verhandelingen van het Koninklijk Instituut Voor Taal-, Land- en Volkenkunde*, 27, Gravenhage.


A
103° 40'
B
103° 55'
C
104° 10'
D
1
1° 25'
20'
15
1° 10'
3
M A L A Y S I A
S I N G A P O R E
I N D O N E S I A
Sungai Johor
Johore Strait
Tg Penawar
Tg Punggai
Tg Penyusop
Tg Kopok
Pulau Tekong-Besar
P. Ubin
Tg Changi
Tg Pengelih
Tg Ayam
Tg Bunga
Tg Merawang
Tg Gul
Tg Piai
Tg Bedok
Tg Katong
SELAT SINKI
P. Sakijang Bendera
P. Sudong
P. Pawai
P. Satumu
MAIN STRAIT
Buffalo Rock
P. Takong
Phillip Channel
P. Pemping
P. Lumba
Selat Butan
P. Belakangpadang
Teluk Tering
Tg Sengkuang
Tg Babi
Tg Tondang
PULAU BATAM
PULAU BINTAN
SINGAPORE STRAIT
1° 10' N. 103° 40' E. ①
② 1° 07' N. 103° 44' E.
③ 1° 10' N. 103° 48' E.
④ 1° 11' N. 103° 51' E.
1° 12' N. 103° 52' E. ⑤
⑥ 1° 16' N. 104° 02' E.
Territorial sea boundary and coordinates
Malaysia-Singapore international boundary
Median line
Deep draft tanker routes
Straight baselines

38 Indonesia's maritime boundaries with Australia and Papua New Guinea

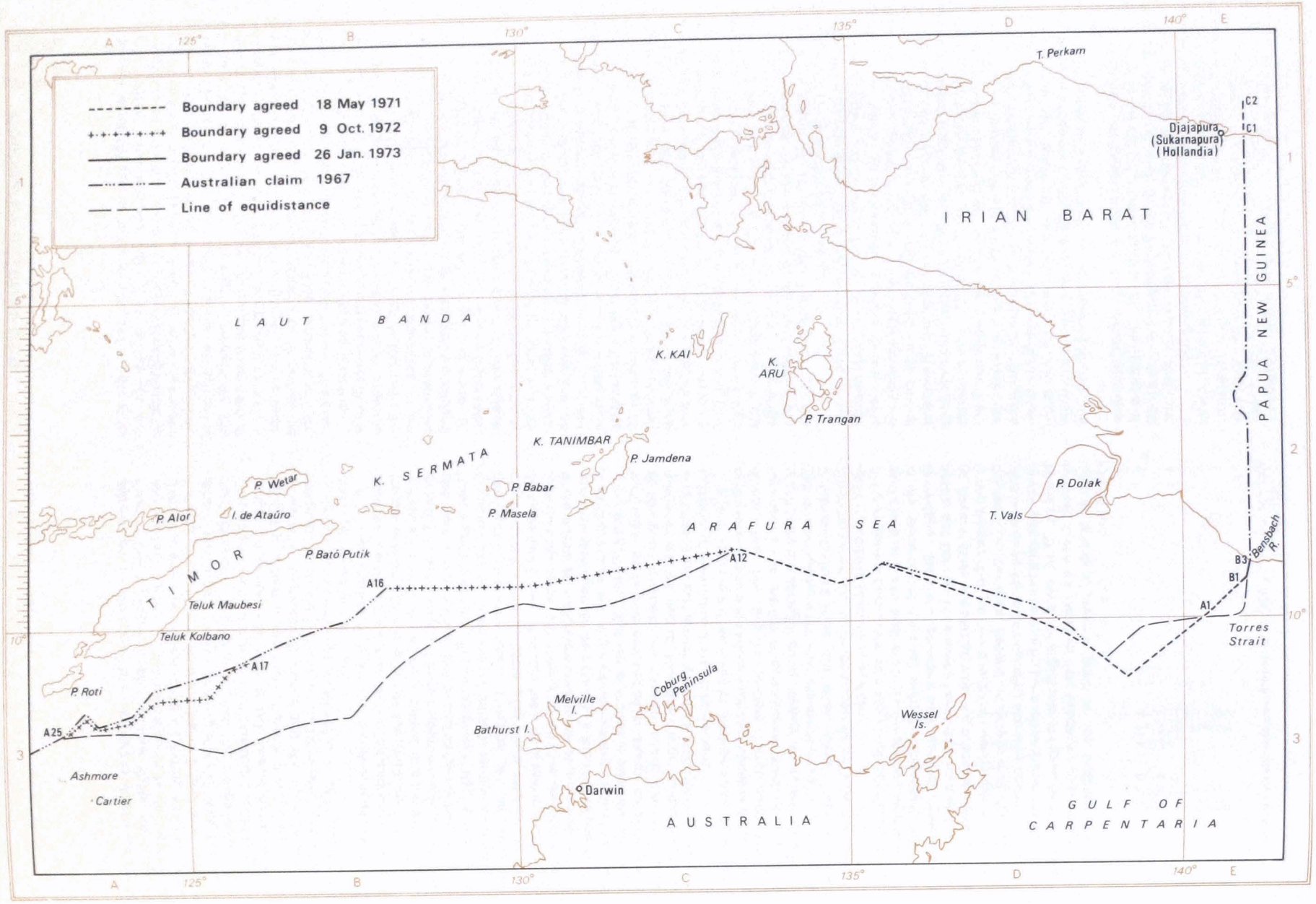
These boundaries were settled in three agreements between 1971 and 1973. The first section of boundary was drawn between points A 12 and B 1 through the eastern Arafura sea on 18 May 1971. By the same agreement a short section of boundary was drawn north of the island of New Guinea. Point A 12 is located at longitude 133°23' east, where that meridian intersects the 200 m (about 100 fathoms) isobath. This depth is important because it is specifically mentioned in the 1958 convention on the continental shelf as being one measure which may be used to define the outer edge of the shelf. West of this meridian there is a deep trough between the continental shelves of northern Australia and the island of Timor; eastwards there is a continuous shelf, shallower than 200 m (about 100 fathoms), between the Australian coast and the island of New Guinea. When Australia laid claim to its continental shelf in 1953 it did not grant permits for oil exploration north of the line of equidistance between the Australian and Indonesian coasts east of point A 12. A line of equidistance is a unique line which at every point is equidistant from the nearest points of the opposite coasts. When the boundaries of adjacent areas were set in 1967 they almost coincided with the line of equidistance in this eastern region of the Arafura sea. This boundary segment presented no major difficulties to the two governments which terminated the line at point B 1, about twenty nautical miles from the land terminus of the boundary between Indonesia and Papua New Guinea. The same agreement drew a short section of boundary thirty nautical miles long between points C 1 and C 2 from the northern terminus of the land boundary across the island of New Guinea. A map produced by the Division of National Mapping in March 1973 shows that a line of equidistance was extended beyond point C 2 for about seventy-eight nautical miles by Indonesian and Australian officers on 20 February 1971, which is three months before the agreement was signed. This extension was not mentioned in the agreement and it is not known whether the extension is recognized by Papua New Guinea. However the 1971 agreement specifies that 'If any lines are drawn extending this line C 1–C 2 northward, they shall be drawn on the same principle, that is to say the principle of equidistance'.

Attention must now be shifted to the sea-floor west of point A 12, because Australia and Indonesia placed different interpretations on the significance of the morphology of the sea-bed to the construction of a boundary between the two countries. The chief feature of the sea-floor is the Timor trough which descends to a maximum depth of about 1700 fathoms along an axis following the alignment of the south coast of Timor, at distances of thirty to sixty nautical miles from that coast. This means that the axis may be as much as 200 nautical miles from the coast of northern Australia. By the exploration permits granted and the Petroleum Adjacent Area boundaries proclaimed, the Australian government revealed its interpretation of the proper continental shelf boundary. The Australian authorities believed that there were two distinct continental shelves; their own stretching for 200 nautical miles or more to the southern edge of the Timor trough, and the continental shelf of Indonesian and Portuguese Timor which was about ten nautical miles wide and extended to the northern rim of the trough. Given this conviction the obvious solution was either to draw two boundaries, each coincident with the limits of the trough, or a single line along the trough's axis. This conviction was not shared by Indonesia. That country regarded the Timor trough as an incidental depression in a continental shelf which stretched from Timor to northern Australia. Accordingly Indonesia argued for a boundary which lay well south of the axis of the trough. The 1958 convention on the continental shelf gives no guide on resolving such a dispute and the only international precedent was not very helpful. Britain and Norway had disagreed over the location of their common shelf boundary because of a shallow trough about 250 fathoms deep close to the Norwegian coast. Britain had taken the same position as Australia while Norway had adopted Indonesia's stance. Britain conceded the Norwegian claim eventually, but it is generally believed that this concession was to avoid any further delays in starting to explore and exploit the oilfields of the North Sea. In any case there is plainly a major difference between the Norwegian trench and the Timor trough which is more than six times deeper. By comparing the Australian claim with the line of equidistance it is clear that a lens-shaped area was in dispute. At that time the Australian-Indonesian dispute involved two areas flanking any claims which Portuguese Timor might make. West of Portugal's claim the area in dispute was about 8100 sq. nautical miles, while east of it the area concerned was 12 800 sq. nautical miles. The theoretical claim by Portuguese Timor was about 12 100 sq. nautical miles.

This serious disagreement in principle could have bedevilled relations between Australia and Indonesia, but the two countries rapidly reached agreement on 9 October 1972. This agreement drew two sections of boundary east and west of the possible Portuguese claim. The first section was an extension of the existing boundary from A 12 to A 16, and this boundary lies very close to the limit claimed by Australia. West of Portuguese Timor a boundary about 195 nautical miles was drawn between A 17 and A 25. This line lay south of the Australian claim and the total area ceded to Indonesia was less than 3000 sq. nautical miles. The eighth article of the agreement referred to those areas allocated to Indonesia for which Australian exploration permits had been granted. It stipulated that Indonesia would be willing to offer holders of such permits arrangements no less favourable than those existing in similar cases under Indonesian law. The agreement also specified that the two countries would consult about the development of any oil or gas fields which lie under the agreed boundary.

The final agreement concerned the short section of sea-bed between the southern terminus of the land boundary between Indonesia and Papua New Guinea and the point B 1. That was defined in the third article of an agreement defining the entire land boundary on 26 January 1973.

In July 1976 Portuguese Timor was absorbed into Indonesia, and this means that eventually Australia will have to negotiate a continental shelf boundary with Indonesia between points A 16 and A 17. It is known that the Portuguese were interested in a boundary lying south of the straight line connecting those points, which would preserve the even tenor of the Australian-Indonesian segments, and some permits had been awarded by Portugal for areas where Australian permits also applied. However, Portugal considered that no negotiations should take place until the law of the sea conference produced a new or confirmed set of rules for the division of continental shelves. Now that Portugal has disappeared from the scene it might be considered that the prospect of Australia and Indonesia reaching speedy agreement would be good. However, because Australia does not recognize Portuguese Timor's absorption into Indonesia it is hard to see how negotiations can begin. Further it would not be surprising if Indonesia took a harder bargaining position over this potential dispute. First, it might do so in retaliation for Australia's attitude to Portuguese Timor. Second, it is believed that this area may contain hydrocarbon deposits. Third, Australia's generous treatment of Papua New Guinea in Torres strait might be assumed to provide a precedent for generosity in the western Arafura sea.


Boundary agreed 18 May 1971
Boundary agreed 9 Oct. 1972
Boundary agreed 26 Jan. 1973
Australian claim 1967
Line of equidistance
T. Perkam
Djajapura (Sukarnapura) (Hollandia)
C2
C1
IRIAN BARAT
PAPUA NEW GUINEA
LAUT BANDA
K. KAI
K. ARU
P. Trangan
K. TANIMBAR
P. Jamdena
K. SERMATA
P. Wetar
P. Alor
I. de Ataúro
P. Babar
P. Masela
P. Dolak
T. Vals
ARAFURA SEA
Bensbach R.
TIMOR
P. Bató Putik
Teluk Maubesi
Teluk Kolbano
A16
A12
B3
B1
A1
Torres Strait
A17
P. Roti
A25
Ashmore
Cartier
Melville I.
Coburg Peninsula
Bathurst I.
Wessel Is.
Darwin
AUSTRALIA
GULF OF CARPENTARIA
A
B
C
D
E
125°
130°
135°
140°
1
3
5°
10°

39 Boundaries in Torres strait

There are about 124 islands in Torres strait which extends for eighty nautical miles between Cape York in Australia and Coreigegemuba point on the coast of Papua New Guinea. Since about 1968 the authorities in Papua New Guinea, which became independent in 1974, have been pressing Australian governments to relinquish their claims to sovereignty over the northern half of the strait. On 5 June 1976 an agreement between the two countries noted that a sea-bed boundary would be drawn south of the islands of Boigu, Dauan and Saibai; that the islands north of this boundary would remain Australian with their own territorial waters; and that a zone would be established to protect the traditional way of life of the 'Torres Strait islanders and the residents of the adjacent coast of Papua New Guinea'. The exact location of the continuous sea-bed boundary has not been fixed.

The best account of the history of boundaries in Torres strait is contained in a book by Van der Veur (1966). In 1859, when the colony of Queensland was created it included 'all and every the adjacent islands, their members and appurtenances, in the Pacific Ocean'. In 1872 the governor was allowed to extend his jurisdiction over all islands within 60 m (96 km) of the Queensland coast. This authority placed all the islands south of about 10° south under Queensland's jurisdiction, and allowed Queensland to control the only navigable course for medium to large vessels through the Prince of Wales channel. In 1873 the first regular steamship mail service was initiated through the strait and this attracted attention to an area which was already exciting interest in London. This interest was transmitted to Brisbane and the authorities there began to press the British government to annex the southern coast of Papua. This policy was advocated for a number of reasons: British commerce through the strait would be protected from foreign interference; New Guinea would provide markets for British goods and might yield gold; foreign powers, specifically France and Germany, would be prevented from establishing themselves on Australia's doorstep; the regulation of pearling, fishing and the recruitment of native labour would be made easier; and finally it would avoid the possibility of a foreign country establishing a penal colony in the area! The British government declined to act, but suggested that Queensland might exert its authority over all the islands in Torres strait, and this was done. A member of the Queensland government justified this territorial extension on the ground that Torres strait was the Bosphorus of the Turkey that was Queensland.

Only five years later Britain found it appropriate to establish its authority in Papua and so the *raison d'être* for Queensland's possession of the islands disappeared. Immediately there were proposals to cede some of the islands to British authorities in Papua. In 1886 Britain proposed that Queensland should control only those islands south of the tenth parallel, but Queensland countered, seven years later, by offering to cede the islands lying closest to the Papuan coast north of 9°30' south. A counter British proposal in 1894 recommended a boundary southwest from Bramble Cay to Basilisk passage, then northwest to Deliverance island. In 1896 Queensland offered a compromise by moving the turning point of this line from the Basilisk passage to the Moon passage, and this boundary was accepted. Unfortunately Australia then became a federation and it did not prove possible for the arrangements to penetrate the Australian constitutional thicket.

The issue then was largely forgotten and was revived only when Papua New Guinea's independence approached. The existence of Australian islands very close to the Papuan coast was clearly an emotive issue for the leaders of the new country and their campaign to secure a fresh delimitation in the strait began.

It is convenient at this point to summarize the main reasons why Papua New Guinea believes that a new boundary is necessary. First, it is argued that Australia's possession of the islands is based on a colonial action which is not binding on Papua New Guinea. In their view it is unconscionable that an accident of colonial division affecting a few small islands a century ago should serve to deny a newly-independent nation rights over land, sea and sea-bed to which it could otherwise, in its view, lawfully lay claim. It is true that the islands were apportioned by a colonial authority, but so were most of the islands in southeast Asia and most of the territory on the continents of Africa, Asia, South and North America. It should be recalled that the Solomon islands were divided by an Anglo-German agreement in 1884 and this resulted in Bougainville, with its rich copper deposits, falling within Papua New Guinea today. Second, it is alleged that this situation is geographically unique and that no self-respecting nation would tolerate it. This argument falls when it is recalled that similar situations exist off the coasts of Sabah, Cambodia, Turkey, France, Canada and Venezuela.

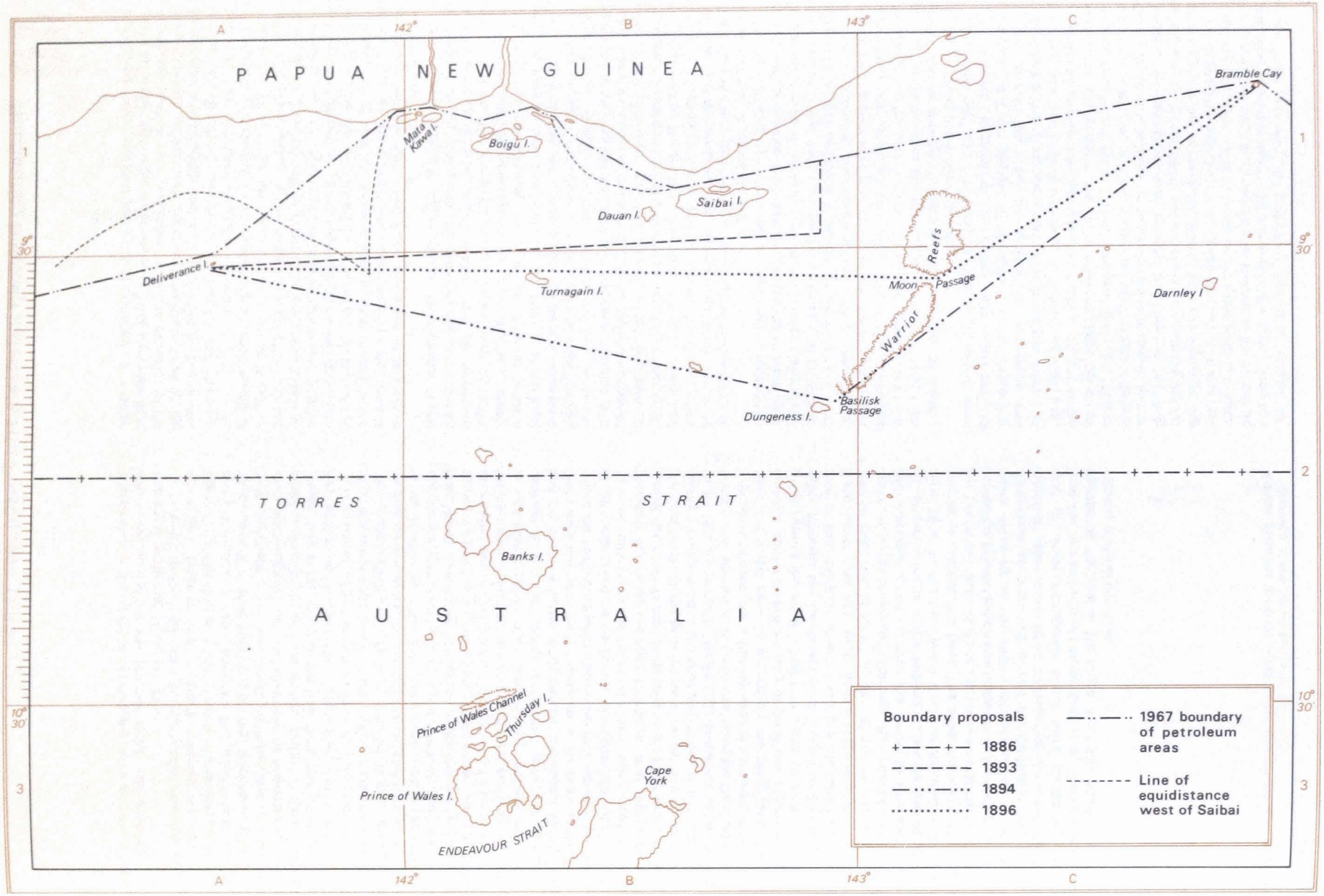
It is now necessary to look at the maritime boundaries which Australia is entitled to claim under the conventions on the law of the sea, to which Papua New Guinea does not subscribe.

First, each Australian island is entitled to a band of territorial waters. This band measures three nautical miles, which has been claimed in Australia since 1878, except on the northern shores of those islands closer than six nautical miles to Papua New Guinea. In this last situation Australia is entitled to territorial waters up to the line of equidistance drawn through the channel between the islands and the Papuan coast. Australia is also entitled to an exclusive fishing zone which has been set at twelve nautical miles from the coast since 1967. Clearly the full zone cannot be claimed where Australian islands are close to the Papuan coast; in such circumstances Australia may claim to a line of equidistance. The Australian exclusive fishing zone would occupy most of the waters in the strait. Finally, Australia is entitled to claim the continental shelf adjoining its mainland and all its islands, up to the line of equidistance between the Papuan coast and the nearest Australian islands; such a boundary places most of the strait's floor under Australian authority, and it is this boundary which it is proposed to move under the latest agreement.

In 1967 Australia defined areas for the supervision of petroleum exploration adjacent to various Australian states and Papua New Guinea. That boundary in northern Torres strait does not correspond with the line of equidistance. North of Deliverance island there is a zone 264.26 sq. nautical miles, which was left to Papua New Guinea, which Australia might properly claim. East of Deliverance island there are three areas under Australian jurisdiction which can be properly claimed by Papua New Guinea, and they total 347.48 sq. nautical miles.

Three general points may be made about this dispute. First, it would be possible for Australia to give Papua New Guinea a share in the resources of the strait without relinquishing any of its sovereignty. Such an agreement was reached between Saudi Arabia and Bahrain in February 1958, when an area of thirty-six sq. nautical miles was placed under Saudi Arabia's authority, and it was agreed that the two countries would share any revenue derived from the area. Second, in only one of the dozens of international agreements regarding maritime boundaries has an island belonging to one country been left on the 'wrong' side of the boundary. Third, since the arguments of Papua New Guinea are so weak it can be assumed that Australian concessions result from an anxiety to preserve good political relations with a near neighbour.

Van der Veur, P. (1966). *The search for New Guinea's boundaries.* Canberra.


A
142°
B
143°
C
PAPUA NEW GUINEA
Bramble Cay
Mata Kawa I.
Boigu I.
Saibai I.
Dauan I.
Deliverance I.
Turnagain I.
Reefs
Moon Passage
Darnley I
Warrior
Basilisk Passage
Dungeness I.
TORRES STRAIT
Banks I.
AUSTRALIA
Prince of Wales Channel
Thursday I.
Cape York
Prince of Wales I.
ENDEAVOUR STRAIT
9° 30'
10° 30'
1
2
3
Boundary proposals
1886
1893
1894
1896
1967 boundary of petroleum areas
Line of equidistance west of Saibai

40 Boundaries between Indonesia and Portuguese Timor

Portuguese Timor occupied two areas of the island. The larger part was located in the east of the island, and was separated from Indonesian territory by a boundary linking the estuaries of the Mota Hallmuak on the north coast and the Mota Talas on the south coast; its total length was about 128 km (80 m). The smaller section around Ocussi, lay on the north coast, and shared a boundary of about 101 km (63 m) with Indonesia.

The island has a backbone of parallel ridges formed mainly of Triassic and Permian limestones which reach a peak of 2920 m (9570 ft) at Tata Mailau in the Ramelau range of Portuguese Timor, and a peak of 2365 m (7750 ft) at Goenoeng Moetis in Indonesia. The long dry season, which lasts from May to October at Koepang, supports scrub and thorny jungle on the north coast, which is succeeded by casuarina and eucalypts in the central uplands, and denser sandalwood and bamboo forests in the south. There are many short rivers draining Timor, but none is navigable, and most fail to maintain an uninterrupted flow during the dry season.

The first agreement was signed between the Netherlands and Portugal on 20 April 1859, when the countries decided 'to put an end to existing uncertainties' in relation to their respective territories in the Timor and Solor archipelagos. Both countries had signed treaties of protection with a number of different chiefs and there was the constant risk of friction between zealous administrators jealous of national prestige. The first article fixed the boundary running north-south across the island by allocating indigenous states to Portugal and the Netherlands. Thus Portugal obtained Cova, Ballbo, Lamakitu, Takahay and Suai, while the Netherlands secured Djenilo, Naitimu, Fialarang, Mandeo and Lakecune. Each signatory maintained a presence on the opposite side of the boundary; the Netherlands ceded Maubara to Portugal, but retained control over the enclave of Maucatar, while Portugal retained Ocussi and Ambeno on the north coast, and Noe Muti, an enclave which lay south of Ocussi. The two countries also resolved disputes over the ownership of islands north of Timor, with Portugal securing Pulo Kambing and the Netherlands obtaining Flores, Adenara and Solor.

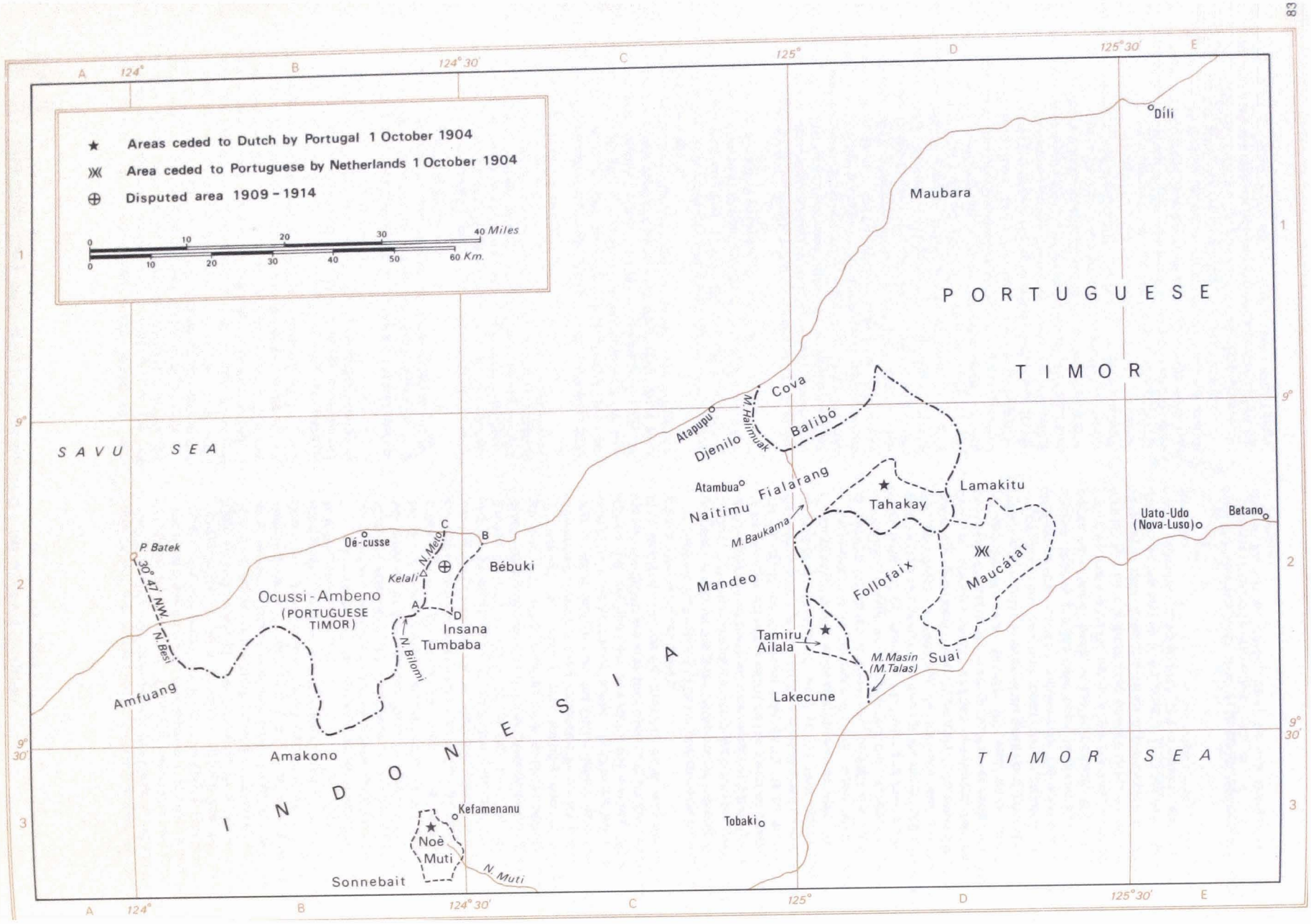
The next development occurred in 1893 when a convention dealing with commerce and navigation contained an agreement 'to establish the boundary of their possessions in the clearest and most exact fashion' and 'to cause the enclaves now existing to disappear'. A joint commission was appointed to carry out this work and prepared its recommendations in the period 1898–9. The entire boundary between the estuaries of the Mota Biku and Mota Talas was surveyed and both sides made conflicting proposals. The boundary around Ocussi was surveyed from the west as far as the river Bilomi, but local tribesmen forced the commission to abandon its work without reaching the eastern terminus, at the estuary of the river Meto.

Delegates met again in 1902 to reconcile the various commissioners' suggestions. There was rapid agreement to exchange the Dutch enclave of Maucatar for the Portuguese enclave of Noe Muti, but for a time the conference was deadlocked over a Portuguese claim that the Dutch territory of Fialarang, lying east of the Bankarna river, should be ceded; such a cession would have eliminated the deep Dutch salient into the eastern part of the island. Eventually when the Dutch delegates reported that the citizens of Fialarang refused absolutely to pass under the sovereignty of Portugal this demand was abandoned. The Portuguese raised a second claim in regard to the territory of Ambeno. The additional area claimed is shown on the map opposite by the letters ABCD; the Netherlands claimed the line AC while the Portuguese considered ADB to be the proper limit. The Dutch delegates rejected the Portuguese proposal, and this firm stand was successful, probably because they threatened to open the question of whether Ocussi was an enclave which should be eliminated according to the 1893 convention. Because Ocussi has a coastline it cannot be technically described as an enclave, but this was not a risk which the Portuguese were prepared to take, and so an agreement was reached which was enshrined in a convention signed on 1 October 1904.

Under the terms of this treaty Portugal ceded Noe Muti, Tamiru Alala and Tahakay, and in return received Maucatar. The boundary of the Ocussi-Ambeno territory was defined in detail apart from the section between the Bilomi river and the headwaters of the Noel Meto, and the boundary from the northern to the southern coasts was clearly delimited, and arrangements were made by this treaty to demarcate the boundary as soon as possible. This joint commission was formed in June 1909 and began work at the mouth of the Noel Meto, the source of which was reached on 10 June. At this point a disagreement arose.

The boundary from the river Bilomi to the source of the Noel Meto was described in the 1904 convention in the following terms. 'The boundary follows the thalweg of the Oe-Sunan, runs as much as possible across Nipani and Kelali (Keli), and strikes the source of the Noel Meto'. The Dutch delegates were certain that the boundary had to cross the summit of mount Kelali, lying west of the Noel Meto's source; the Portuguese representatives were equally convinced that the boundary should follow the thalweg of certain rivers lying east of the Noel Meto's source, and after some debate the commission decided to survey both lines, and refer the matter to their superior authorities. When the commission reached the southern terminus of the line at the confluence of the Oe-Sunan and the Bilomi a further disagreement developed. Quite simply there were two north bank tributaries at the point on the Bilomi where the 1899 commission had ended their labours, and neither of them was called the Oe-Sunan. The Dutch did not regard this nominal difference as important and considered that the boundary lay along the river Kamboun, and then proceeded almost due north through Nipani and mount Kelali to the source of the Noel Meto. These features were almost in a direct line and clearly corresponded to the boundary shown in a map prepared by the 1899 commission. The Portuguese authorities however had found a river which they claimed was called the Oe-Sunan further to the east, however this waterway was not a tributary to the Bilomi river, but it did have its source on the north face of mount Kinapua, not far from a tributary of the Bilomi which rose on the south face of the mount. The Portuguese claimed a boundary which followed the Oe-Sunan north from mount Kinapua, and then at Fatu Mutassa diverted along a tributary called the Ni Fullan, which rose close to the source of the Noel Meto. The total area involved was about 57 sq. km (22 sq. m), and surprisingly neither side was prepared to concede. As a result of this impasse both countries agreed to refer the matter to arbitration, and a judgement, in favour of the Netherlands was handed down on 25 June 1914 by the Permanent Court of Arbitration (*American Journal of International Law*). The arbitrator was convinced by three principal facts. First the boundary was defined in the 1904 convention in exactly the same language as the draft proposed by Dutch delegates to the 1902 conference. Second, in 1899 a Portuguese proposal had placed the Oe-Sunan river west of Nunkalai, which is located on the river Bilomi; the new Oe-Sunan river on which Portuguese hopes were placed lay east of Nunkalai, and so could not be the same river. Third the Oe-Sunan claimed by Portugal as the proper boundary course was not a tributary of the Bilomi river.

'Judicial decisions involving questions of international law', *American Journal of International Law* (1915), 9:240–68.


Areas ceded to Dutch by Portugal 1 October 1904
Area ceded to Portuguese by Netherlands 1 October 1904
Disputed area 1909 – 1914
0 10 20 30 40 Miles
0 10 20 30 40 50 60 Km.
Díli
Maubara
PORTUGUESE
TIMOR
SAVU SEA
Cova
Balibó
Djenilo
Atapupu
M. Talimuak
Atambua
Naitimu
Fialarang
Lamakitu
Tahakay
M. Baukama
Uato-Udo (Nova-Luso)
Betano
Mandeo
Follofaix
Maucátar
Tamiru
Ailala
M. Masin (M. Talas)
Suai
Lakecune
Oé-cusse
P. Batek
30° 47' NW
N. Besi
Ocussi-Ambeno
(PORTUGUESE TIMOR)
Amfuang
Kelali
N. Meto
Bébuki
Insana
Tumbaba
N. Bilomi
INDONESIA
Amakono
TIMOR SEA
Tobaki
Kefamenanu
Noè Muti
Sonnebait
N. Muti
A 124°
B 124° 30'
C 125°
D 125° 30'
E
1
2
3
9°
9° 30'

41 The boundary between Indonesia and Papua New Guinea

The basis of this boundary was largely settled by Dutch annexations in the first half of the nineteenth century. The best account of this period of boundary development is by van der Veur (1966) and the following discussion is based on his work.

In 1828 Dutch authorities, which had made vague claims to New Guinea on the strength of the jurisdiction of the sultan of the Moluccas, decided to take direct action. An expedition was sent to New Guinea and a small settlement was established on Triton bay after the coast had been explored from the Tandjung Jamursba to the Digul river. These actions resulted in the following definition of Dutch territory on 24 August 1828.

> That part of New Guinea and its interior, beginning at the 141st meridian east of Greenwich on the south coast, and from there west northwest and northward to the Cape of Good Hope [Tandjung Jamursba], situated on the north coast . . . (quoted in van der Veur, 10).

After Britain asked the Dutch for a clear statement of the extent of territory occupied by tribes subject to Dutch authority, they decided to expand the area claimed. In 1848 a secret declaration defined Dutch territory as follows.

> From Cape Saprop Maneh [Tandjung Djar] 140°47' meridian east of Greenwich on the north coast, along that coast, the Bay of Wandammen [Teluk Sarera] to Cape Kain Kain Beba [Tandjung Jamursba] and further west, south and south-east to the by Proclamation of 24 August 1828 provisionally adopted boundary at 141° E.L. on the south coast; including the interior, for so far as this . . . will appear to belong to Netherlands territory (quoted in van der Veur, 12).

The secret declaration was made public in 1865 and then in 1875 the eastern boundary was described as a straight line from Tandjung Djar on the north coast to the intersection of meridian 141° east on the south coast. Thus the alignment of the present boundary was fixed fairly closely by a unilateral Dutch declaration before Britain and Germany had acquired their respective colonies on the island.

In 1884 Germany and Britain established claims to New Guinea and Papua respectively and in April 1885 they drew a boundary consisting of a series of straight lines from Mitre Rock on the east coast to the intersection of parallel 5° south and meridian 141° east.

The Anglo-Dutch negotiations began in 1893 after Britain had complained about raids of headhunters from Dutch territory east of longitude 141° east. British and Dutch officials visited the coast and identified the Bensbach river which they recommended should serve as the boundary. The longitude of that river was determined as 141°01' 47.9" east. This meant that Britain was conceding a strip of territory about 3 km (1.8 m) wide from the south coast to the parallel 5° south where the Anglo-German boundary was located. To offset this concession Britain suggested that the meridian should only be followed as far as its first intersection with the Fly river. The boundary should then follow the Fly river upstream to its second intersection with the meridian 141° east and then that meridian to the Anglo-German-Dutch tri-junction. The British authorities justified this suggestion on the ground that explorers and gold-seekers would use the Fly river as a convenient route, and it would be inconvenient if part of that route fell entirely within Dutch territory. It was also noted that two large hostile tribes occupied this bend in the river and it would be easier to deal with them if a clear river boundary was used. This suggestion was accepted by the Dutch and an agreement was finalized on 20 July 1895. This agreement contained an error which could have proved serious. The treaty draughtsmen apparently forgot that the Fly river crossed the meridian 141° east *twice*, and it was the second intersection which was intended, not the first as the treaty suggests. Happily this error did not create any future difficulties and the latest treaty has eliminated it.

The Dutch then turned to the north coast and sought an agreement with Germany, but the authorities in that country were in no hurry to settle a boundary, and it was 1910 before negotiations and surveys began. Germany argued that since the coastal terminus had been decided there was no need to mark the boundary inland because European settlement was improbable and indeed any economic development was unlikely. In any case most available German surveyors were busy at that time in Africa solving more pressing problems around the perimeters of Cameroun, Tanganyika, and Southwest Africa. When the survey teams did start work the Dutch wanted a detailed survey of a wide strip so that a natural boundary could be constructed while the Germans wanted a rapid survey of a narrow area between the coast and the tri-junction. In fact the surveys did produce valuable reports on the area but war intervened in 1914 before the boundary was finally settled.

The end of the war left Australia as the successor to German authority, and since Australia had succeeded England in Papua in 1905, the settlement of the entire boundary across New Guinea was a matter for Australia and the Netherlands. The best account of the final evolution of this boundary after 1919 is contained in an article by Cook, Macartney and Stott. There were some minor incidents along the northern section of the boundary and in 1928 an Australian surveyor, A. G. Harrison, placed a marker near Wutong on meridian 141°0' 13.5" and recorded that the Dutch border lay 400 m (1312 ft) to the west. In 1933 a joint determination occurred and it was discovered that there was a gap of 398 m (1306 ft) between the Australian and Dutch locations of meridian 141° east. It was sensibly decided to split the difference but that point was unsuitable for a marker and so it was placed 168 m (550 ft) from the Dutch determination and 230 m (756 ft) from the Australian location. In 1936 the two governments agreed that the boundary should be the meridian through that marker. In 1939 there were proposals to mark the intersection of the meridians with the Fly river but again war prevented that project from being completed.

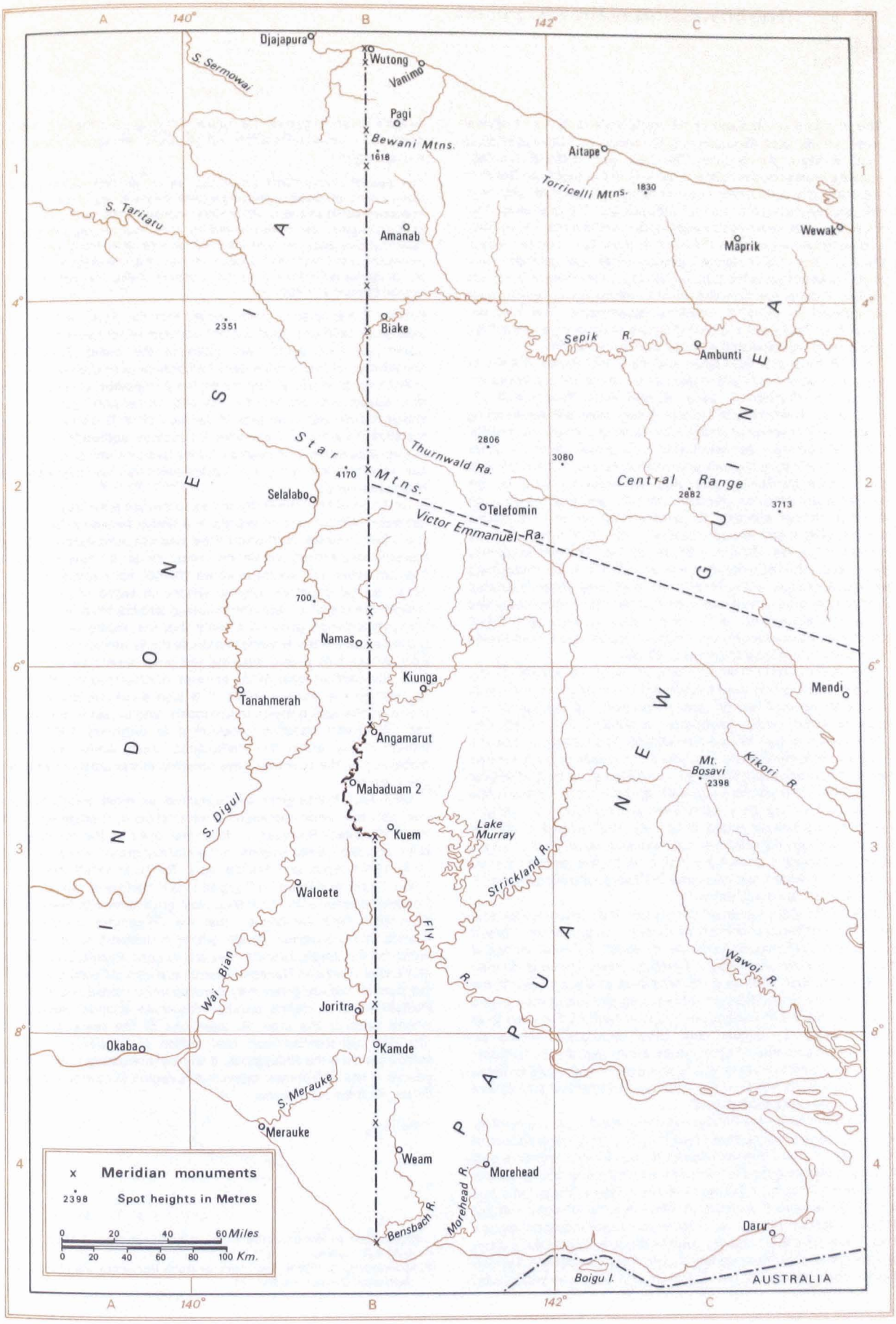
In 1960 the Australian and Dutch governments agreed that the boundary would be the great circle course passing through the obelisk on the north coast and the point where the meridian 141° east made its most northerly intersection with the Fly river. South of the river the boundary would be the meridian passing through the mouth of the Bensbach river as far as its most southerly intersection with the Fly river. This meridian had been determined in 1958 to be 141°01' 07" east, and in 1962 monuments were erected on the Fly river at the appropriate intersections.

The work had to be done all over again when Indonesia succeeded the Dutch in West Irian. In 1964 the Australian and Indonesian governments agreed that the boundary north of the Fly river would be meridian 141° east and that south of the Fly river it would be the meridian through the mouth of the Bensbach. The work began in 1966 and the markers were erected in two years. An agreement dated 26 January 1973 listed the fourteen boundary markers which had been established. Ten marked the meridian 141° east to the north of the Fly river while the remainder marked the meridian 141°01' 10" east which was the new determination of the location of the mouth of the Bensbach.

This boundary has now been clearly defined because in addition to the fourteen monuments the locations of major villages close to the line have been fixed and signs have been placed on all major tracks in the borderland. The only possible problem seems to be the nature of the Fly river, which pursues a fluctuating course in the section where it forms the boundary. The 1973 agreement does not make any provision for significant changes in the course of the river; if the area ever experiences major economic development this omission will have to be remedied.

Cook, D., Macartney, J. C., Stott, P. M. (1968). Where is the border? *Australian External Territories*, 8(5):7–18.

van der Veur, P. W. (1966). *Search for New Guinea's boundaries.* Canberra.


A
140°
B
142°
C
Djajapura
Wutong
Vanimo
S. Sermowai
Pagi
Bewani Mtns.
1618
Aitape
Torricelli Mtns.
1830
S. Tarittatu
Amanab
Maprik
Wewak
2351
Biake
Sepik R.
Ambunti
Star Mtns.
4170
Thurnwald Ra.
2806
3080
Central Range
2882
3713
Selalabo
Telefomin
Victor Emmanuel Ra.
700
Namas
Kiunga
Tanahmerah
Mendi
Angamarut
Mt. Bosavi
2398
Kikori R.
Mabaduam 2
S. Digul
Kuem
Lake Murray
Strickland R.
Waloete
Fly R.
Wawoi R.
Wai Bian
Joritra
Okaba
Kamde
S. Merauke
Merauke
Weam
Morehead
Morehead R.
Bensbach R.
Daru
Boigu I.
AUSTRALIA
INDONESIA
PAPUA NEW GUINEA
Meridian monuments
2398 Spot heights in Metres
0 20 40 60 Miles
0 20 40 60 80 100 Km.

42 The boundaries of the Philippines

The compact archipelago of the Philippines consists of several large islands, such as Luzon and Mindanao, and dozens of small islets. It has a simple form. The main part of the archipelago consists of the concentration of islands in the east from Batan in the north to the southern coast of Mindanao, and the islands in this section enclose the small Sibuyan and Visayan seas. Two lines of islands stretch southwestwards from this main island axis and enclose the extensive Sulu sea. The northern arm consists of Palawan and the Calamian group, while the southern arm includes Basilan and the Sulu archipelago. The present boundary of the Philippines consists of the treaty limits which were established in three international agreements. The first two concerned Spain and the United States of America and the third was concluded between the United States and Britain.

On 10 December 1898 Spain and the United States of America signed a peace treaty which transferred to the United States the Spanish territories of Cuba, Puerto Rico, Guam and the Philippines. The islands in the archipelago were defined as being contained by a series of straight lines linking known coordinates. The 1898 boundary was identical with the present treaty limits for most of their length, the only exception occurred in the southwest corner near Borneo. In that area the boundary followed the parallel 4°45' north to meridian 119°35' east, and then turned north along that meridian to parallel 7°40' which is the same parallel used today through Balabac strait. This meant that the islands of Cagayan Sulu and Sibutu, as well as numerous small islets were excluded from American jurisdiction. It didn't take long for the American authorities to discover that these excluded islands were also considered to be Spanish, and a new treaty was signed in November 1900. Under this arrangement Spain transferred its sovereignty over these islands to the United States of America for a consideration of $100 000.

The British North Borneo Company took advantage of the change in authority in the Philippines to purchase from the sultan of Sulu some small islands lying off the port of Sandakan on the coast of Sabah. These islands are located at 6°15' north and 118°7' east, and the price paid was $3200. The sultan then told the American representative in the area that the islands really formed part of the Spanish territory which had been ceded by the treaty of 1898. America's reaction was swift and a warship planted the United States' flag on all the islands in question. An Anglo-American agreement dated 3/10 July 1907 provided for the British company to continue their administration of the islands without acquiring any territorial rights, and it was settled that this arrangement would continue until the two countries delimited a boundary through these waters.

That delimitation occurred thirty years later when Britain and America negotiated a precise boundary to separate their island possessions off the northeast coast of Sabah. By an exchange of notes dated 2 January 1930 the present treaty limit was defined between Balabac strait and the seas east of Darvel bay. At the same time the United States of America agreed that certain leases made by the British authorities in good faith in the islands of Boaan, Lihiman, Langaan and Great Bakkungan would be permitted to continue. Those leases amounted to 132 hectares (326 acres), and two years later it was agreed that a further lease of 5 hectares (13 acres), which had been overlooked on Lihiman island, would be added to the list.

In the early 1960s the Philippines announced claims to territory in Sabah on the ground that it had formed part of the kingdom of the sultan of Sulu. It is considered by some commentators that this claim was designed to hamper the formation of the Malaysian federation, although if this was the aim it failed. Tregonning has written an excellent account of this territorial dispute and his careful analysis seems to destroy the case mounted by the Philippines. The first powerful counter argument against the claim is provided by a protocol agreed by Germany, Britain and Spain in March 1885. Under its terms Britain and Germany recognized Spain's sovereignty over the Sulu archipelago, but the third article specified those territories which were excluded from the archipelago.

> The Spanish Government renounces, as far as regards the British Government, all claims of sovereignty over the territories of the continent of Borneo, which belong, or which have belonged in the past to the Sultan of Sulu (Jolo), and which comprise the neighbouring islands of Balambangan, Banguey, and Malawali, as well as all those comprised within a zone of 3 maritime leagues from the coast, and which form part of the territories administered by the Company styled the "British North Borneo Company" (C4390, 4).

Further it has already been shown that the Spanish-American treaties of 1898 and 1900 did not concern either the mainland of Sabah or the islands very close to the coast. Finally the constitution of the independent Philippines uses the treaty limits in defining its territory. Apparently the Philippines' claim rests on the translation of one word in the original cession signed by the sultan of Sulu and Overbeck in January 1878. British authorities translate the word as *cede*, while Philippines' authorities translate the word as *lease*. This seems a flimsy basis on which to lay claim to a neighbour's territory, and it does seem that the claim has now been abandoned.

On 17 June 1961 the Philippines proclaimed a series of straight baselines surrounding its islands, in a similar fashion to the earlier claim by Indonesia. As shown on the map opposite the continuous baseline lies entirely within the treaty limits. It measures 8174 nautical miles, and encloses about 160 500 sq. nautical miles of ocean as the country's internal waters. In terms of jurisdiction internal waters of a state are indistinguishable from its territory. The proclamation goes on to note that the waters between the baseline and the treaty limits constitute the territorial waters of the Philippines. This means that the territorial waters vary in width from 294 nautical miles in the extreme northeast to less than one nautical mile in the southwest. It is also a curious fact that the island of Miangas belongs to Indonesia, and in fact forms part of the Indonesian baseline proclaimed in February 1960, even though it lies within the Philippines' treaty limits. Efforts to discover how the countries have resolved this anomaly have been unsuccessful.

Until 1968 it was generally assumed by most commentators that the treaty limits represented the total claim to sovereignty by the Philippines. However, in that year units of the Philippines' army occupied three islands in the Spratly group. They are Loai Ta at 10°41' north and 114°25' east; Thi Tu at 11°03' north and 114°17' east; and Song Tu Dong at 11°27' north and 114°21' east. Correspondence with the Philippines' government in March and November 1975 established that the Philippines claimed five islands in the Kalayaan group, which is believed to be another name for the Spratly Islands; they are Pagasa, Parola, Likas, Kota and Lawak. Flat and Nanshan islands are also claimed but two of the names already given may correspond to these islands. The Philippines also claims another fifty-three islands, islets and drying reefs in the area. At least one of the reefs has been identified as Scarborough reef, which is allegedly used by fishermen from the Philippines. It will be interesting to follow the course of the Philippines' claim in this region in competition with China, Vietnam and Taiwan.

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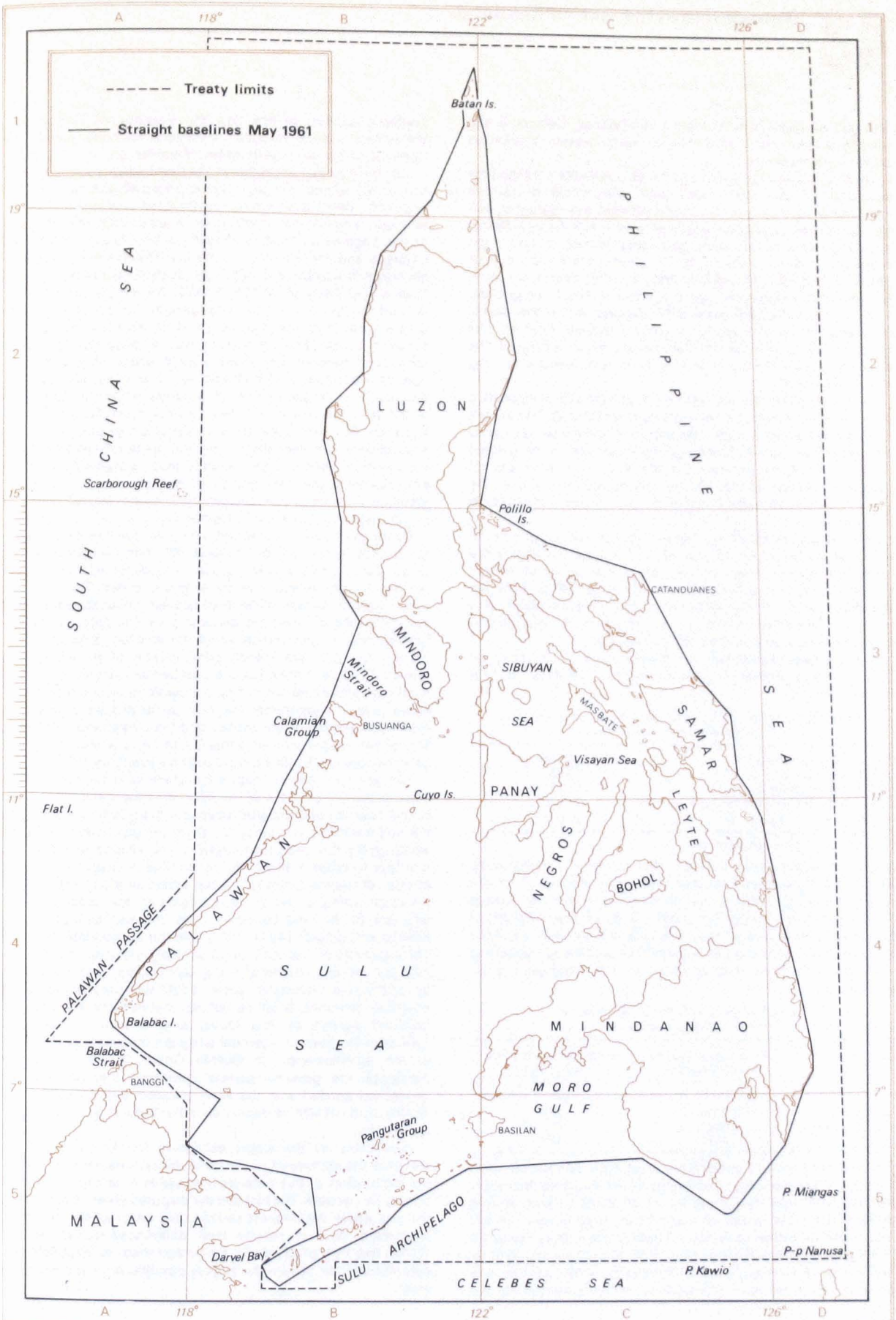
Tregonning, K. G. (1962). The claim for North Borneo by the Philippines, *Australian Outlook*, 16:283–91.


Treaty limits
Straight baselines May 1961
Batan Is.
LUZON
PHILIPPINE SEA
SOUTH CHINA SEA
Scarborough Reef
Polillo Is.
CATANDUANES
MINDORO
Mindoro Strait
SIBUYAN SEA
MASBATE
SAMAR
Calamian Group
BUSUANGA
Visayan Sea
Cuyo Is.
PANAY
Flat I.
NEGROS
LEYTE
BOHOL
PALAWAN
PALAWAN PASSAGE
SULU SEA
Balabac I.
Balabac Strait
BANGGI
MINDANAO
MORO GULF
Pangutaran Group
BASILAN
P. Miangas
MALAYSIA
Darvel Bay
SULU ARCHIPELAGO
P-p Nanusa
P. Kawio
CELEBES SEA
A
B
C
D
118°
122°
126°
1
2
3
4
5
7°
11°
15°
19°

43 Boundaries in the Gulf of Thailand

The gulf of Thailand is bordered by Thailand, Cambodia and Vietnam and the continental shelf claims by present or previous administrations overlap.

On 9 June 1971, the government of South Vietnam defined the boundary of the continental shelf over which it claimed sovereignty by means of thirty-three straight line segments, and the turning points of these segments were identified by latitudes and longitudes measured to the nearest minute. It is only the segments joining points 11 to 33 which concern the gulf of Thailand. The most remarkable feature of this decree concerns the claims to sovereignty over the island of Phu Quoc and the Phu-Du group which lies to the north, together with all the islands in the eastern half of the gulf lying south of latitude 10° north. The island of Wai, near which Cambodian forces captured the American vessel Mayaguez in May 1975, is included within the Vietnamese claim.

On 1 July 1972, the Cambodian government promulgated a unilateral definition of the country's continental shelf. The area is bounded by fourteen straight line segments and the turning points are defined by latitude and longitude measured to the nearest second. This claim encloses the island of Phu Quoc and its associated islands of the Phu-Du group, together with all the major islands in the eastern half of the gulf lying west of longitude 104° east.

The Thai proclamation defining the claimed area of continental shelf was published on 18 May 1973. The area, occupying the north and western areas of the gulf, is defined by seventeen straight line segments linking the terminus of the Cambodian-Thai land boundary with the terminus of the Thai-Malaysian land boundary. The sixteen turning points are located by latitude and longitude measured to the nearest ten seconds.

Each of these boundaries has been marked on the attached map and measurement of the overlapping areas yields the following results:

Conflicting claims to the continental shelf in the Gulf of Thailand
(All measurements in sq. nautical miles)

Cambodia-South Vietnam	14 580*
Cambodia-Thailand	5 798
South Vietnam-Thailand	233
Cambodia-South Vietnam-Thailand	3 610
Total	24 221

* Includes areas of disputed islands

The line of equidistance between Thai and non-Thai baselines, coasts and islands has also been marked on the map. This is a unique line which at every point is equidistant from the nearest points of territory of opposite or adjacent states. A comparison of the claimed boundaries with this line shows that all three countries have claimed areas beyond the line of equidistance and neglected to claim other areas where a claim would seem to be appropriate.

Claims in respect of the line of equidistance
(All measurements in sq. nautical miles)

Country	Claims outside the line of equidistance	Unclaimed areas inside the line of equidistance
Cambodia	8034	127
South Vietnam	2581	18
Thailand	4351	459

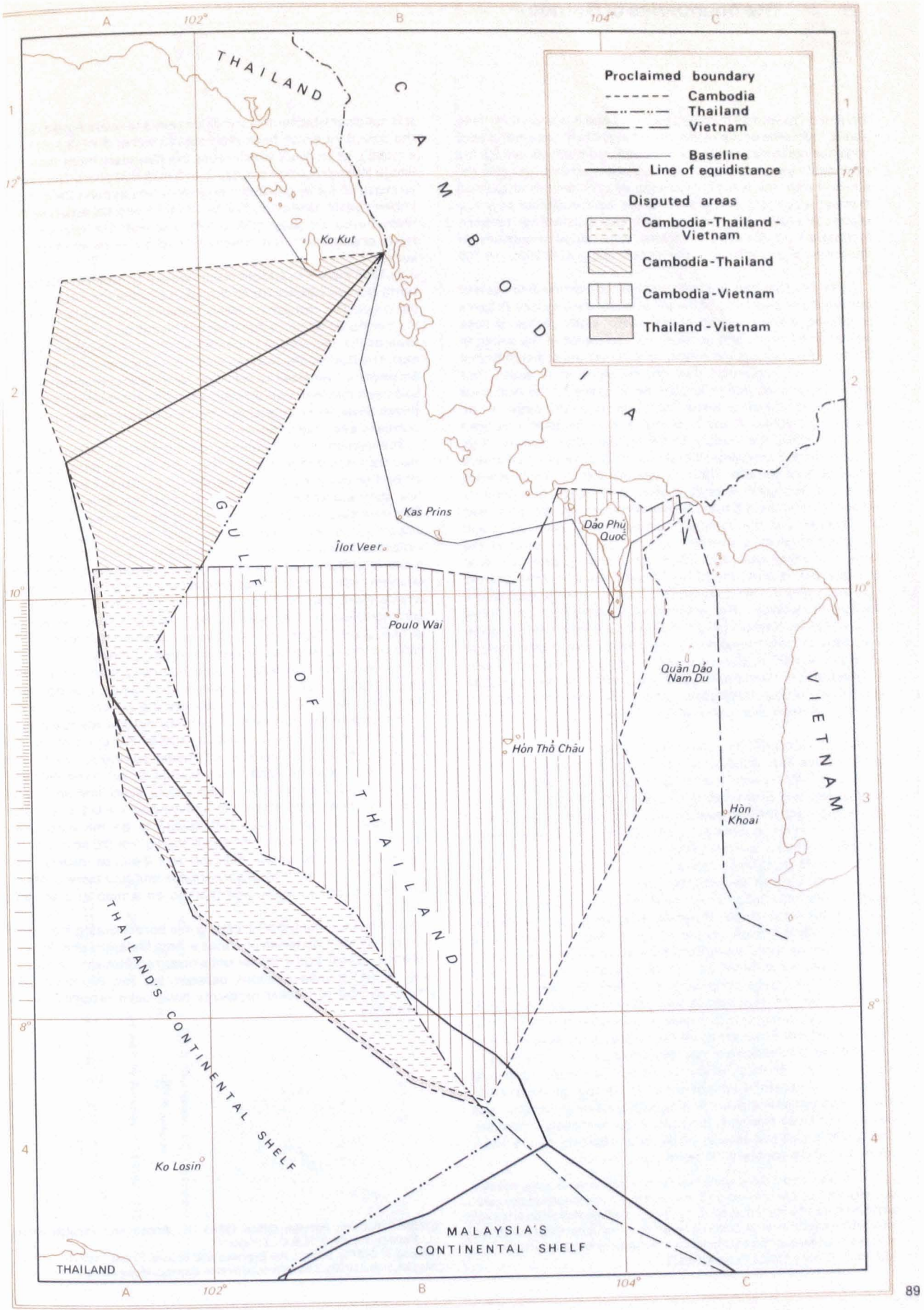
It is now necessary to explore the apparent basis for the lines claimed by each country. Apparently in drawing their boundary the Thai authorities decided to ignore all islands, which are not situated very close to the mainland. In the northern part of this segment this principle operates in Thailand's favour, because the Cambodian-Vietnamese islands of Hon Tho Chau and Wai lie further from the eastern coast of the gulf than the Thai island of Kra and Losin lie from the western shore. However, in the southern section of the line the absence of Cambodian-Vietnamese islands to match Thailand's Ko Losin means that Thailand claims less than its apparent entitlement.

Turning now to that section of the Cambodian boundary which concerns Thailand, two segments can be distinguished. The first segment extends almost due west from the Cambodian-Thailand boundary terminus for ninety-three nautical miles. The alignment of this segment is fixed by drawing a line through the coastal terminus and the highest summit on Thailand's Ko Kut. This alignment is explained, though not justified, by reference to the Franco-Thai treaty of 23 March 1907. An annexe to that treaty defined the terminus of the boundary on the coast as 'a point situated opposite the highest point of Koh-Kut Island'. The seaward terminus of this segment is described as being equidistant between the Cambodian baseline linking the land boundary terminus and Kusrovie Island and the opposite Thai baseline, but this ignores Thailand's control of the northeast shore of the gulf. For about sixty-five nautical miles the Cambodian boundary lies very close to, and just short of the true line of equidistance, but thereafter claims are made beyond this line by the device of utilizing Cambodian islands as points of reference while ignoring the Thai islands of Kra and Losin. The South Vietnamese boundary in respect of Thailand almost coincides with the boundary selected by Cambodia.

Cambodia and South Vietnam disagree over the ownership of the islands in the gulf of Thailand. The principal island is Phu Quoc, but in terms of pressing claims to continental shelf areas the distant and smaller islands of Wai and Hon Tho Chau are much more important. While there is a fair amount of information about the dispute over the ownership of Phu Quoc, there is a marked lack of information about the smaller, distant, isolated islands. In 1913, the French administrator of Hatien and the French Resident of the adjoining Cambodian province of Kompot received applications for mining concessions on some of the off-shore islands. Apparently the two authorities were unable to resolve ownership of the islands and the matter was referred to the governor-general of Indo-China. A decision from the governor-general's office was issued on 31 January 1939.

The governor-general began by referring to the fact that the close proximity of some of the islands to the Cambodian coast called 'logically and geographically' for them to be placed under the administration of Cambodia. Such an attachment, he noted, would avoid the need for citizens of the islands to make long journeys to settle matters with authorities in Cochin China. The division of islands between the two administrations was effected by constructing a line at right angles to the coast from the terminus of the land boundary. This line was defined as one making an angle of 140 G (126°) with the appropriate meridian. The alignment of this line is approximately shown on the attached map by the last segment of the Cambodian continental shelf boundary, which makes an angle of 128° with the meridian of the boundary terminus. It will be noticed that this line intersects the southern portion of Phu Quoc, and to avoid unnecessary confusion the governor-general assigned the whole of the island to the administration of Cochin China. In his penultimate paragraph the governor-general remarked that he had only concerned himself with the administration and policing of the islands, and not with *'la dependance territoriale'*, which remained unresolved.

Predictably all the states bordering the Thailand gulf will welcome the settlement of claims to the continental shelf so that the exploration of this potentially valuable area can proceed as quickly as possible. The fact that the disputed areas cover parts of the gulf where the deepest sedimentary basin exists may either encourage them to resolve their differences quickly so that exploration can proceed, or encourage them to negotiate with determination to secure the largest possible area of continental shelf.


Proclaimed boundary
Cambodia
Thailand
Vietnam
Baseline
Line of equidistance
Disputed areas
Cambodia-Thailand-Vietnam
Cambodia-Thailand
Cambodia-Vietnam
Thailand-Vietnam
THAILAND
CAMBODIA
VIETNAM
GULF OF THAILAND
Ko Kut
Kas Prins
Îlot Veer
Dảo Phú Quốc
Poulo Wai
Quần Dảo Nam Du
Hòn Thổ Châu
Hòn Khoai
THAILAND'S CONTINENTAL SHELF
Ko Losin
MALAYSIA'S CONTINENTAL SHELF
THAILAND
A
B
C
102°
104°

44 The boundaries of Borneo

Borneo is the world's third largest island and it is shared by three states. Indonesia occupies the largest share in the south and east, while the Malaysian territories of Sabah and Sarawak occupy the northwest coast and part of the east coast. Brunei occupies the smallest area and is the only country which is entirely located on Borneo; it consists of two small areas west of Brunei bay. The island straddles the equator and the borderland between Indonesia and Malaysia coincides with folded mountains of sandstone and granite, with the highest peaks at 5125 m (16 700 ft).

Dutch colonies had first been established on the south coast of Borneo at the beginning of the seventeenth century, but Britain's continuing interest began in the 1840s when James Brooke arrived in Sarawak, and in return for assistance to the sultan of Brunei, was given a grant of land. At that time the sultan of Brunei was nominally sovereign over the whole territory which now comprises Brunei, Sabah and Sarawak. However, he had great difficulty in exacting taxes from his subjects beyond the immediate neighbourhood of Brunei, and his kingdom had been decaying since the middle of the seventeenth century. This process accelerated after the arrival of Brooke and became a headlong decline after 1881, when the British North Borneo Company was given a royal charter, and began to extend its influence throughout Sabah. Brunei's territory was whittled away as Sarawak and the company competed with each other and advanced towards a common boundary as they secured the cession of valley after valley. Sarawak enjoyed greater territorial success and its purchase of the Terusan valley in 1884 and the Limbang valley in 1890 ensured that Brunei was a divided coastal enclave in Sarawak. The boundaries of western Brunei follow watersheds for almost all their length, and some of them along the west flank of the Limbang river follow pronounced ridges, rising to a height of 1285 m (4000 ft). The boundary of eastern Brunei follows the river Pendaruan east of the Limbang and a watershed west of the Terusan. Detailed accounts of the British occupation of northern Borneo are provided by Tarling (1971) and Wright (1970).

Britain's authority in north Borneo was confirmed when protectorates were established over Sarawak, Brunei and North Borneo in 1888; it was then time to turn to the negotiation of boundaries with Spain, which occupied the neighbouring Sulu archipelago, and the Netherlands, which claimed the remainder of Borneo. Britain's agreement with Spain has already been described in the account of the Philippines' boundary.

The first Anglo-Dutch boundary was settled on 20 June 1891. The original cession secured by Overbeck and Dent from the sultan of Brunei in 1878 named the Sebuku river as the southern limit on the east coast. However, the British North Borneo Company officials were unable to reach that area before the Dutch. Their advance south from Sandakan was blocked by the hordes of pirates in Darvel bay, and the Dutch took advantage of this situation to press northwards from their southern stations. The two governments agreed to start the boundary on the coast at latitude 4°10' north, and this parallel was used to partition the island of Sebatik. From the coast the boundary proceeded inland in a northwest direction so that the Simengaris river was left to Dutch Borneo. At the intersection of parallel 4°20' north and meridian 117° east the boundary swung westwards towards the main range separating rivers flowing to the coasts of Sarawak and Sabah from those flowing to the south and west coasts of Borneo. The definition of the section of boundary leading to the main watershed along parallel 4°20' north was confusing.

> . . . In the event of the Simengaris River or any other river flowing into the sea below 4°10', being found on survey to cross the proposed boundary within a radius of 5 geographical miles (8 km), the line shall be diverted so as to include such small portions or bends of rivers within Dutch territory; a similar concession being made by the Netherland Government . . . (*British and Foreign State Papers*, 83:42).

It is not clear whether this condition refers to rivers flowing across the boundary which have their source within 5 m (8 km) of the crossing, or to rivers which cross the boundary more than once where those crossings are less than 5 m (8 km) apart. The western terminus of the Anglo-Dutch boundary was at point Datu, a well-known coastal landmark. The boundary along the watershed was really based on geographical faith because the courses of the rivers originating in the mountains had not been established by survey.

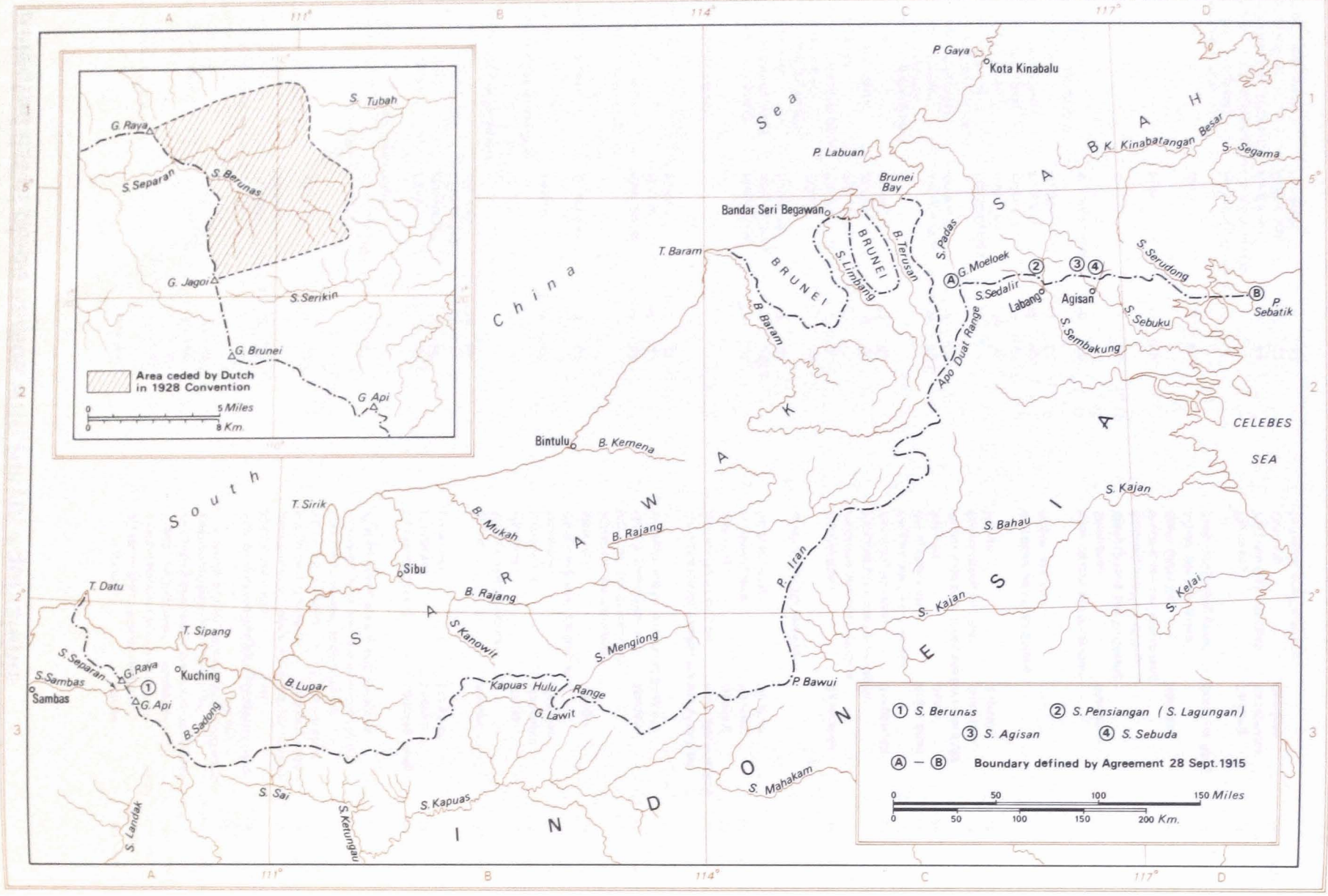
In 1905 there was a slight disagreement between the Dutch and North Borneo officials about the course of the boundary close to the coast. The company officers believed the boundary followed the parallel 4°10' north due west before swinging northwestwards towards the intersection of parallel 4°20' north and meridian 117° east. The Dutch objected that such a boundary would intersect the Simengaris river close to the coast, and insisted that this difficulty had been foreseen and avoided by the negotiations in 1891. The British government agreed with the Dutch representations and the company was advised accordingly.

The section of the boundary from the east coast to Moeloek mountain was demarcated in 1912–13, and the description was embodied in an agreement signed on 28 September 1915. The boundary was shown on an attached map at a scale of 1:500 000. This map also records two lines 5 m (8 km) north and south of the straight lines mentioned in the 1891 treaty; this is a clear indication that the surveyors were concerned with the sources of rivers which crossed the boundary. Their interpretation of the boundary where major rivers crossed the parallel 4°20', but had a source more than 5 m (8 km) distant from the parallel, is not consistent, and it must be presumed that there were concessions to both sides. Pillars were erected on parallel 4°20' north on the banks of the Pensiangan, Agisan and Sebuda rivers.

The third and final Anglo-Dutch boundary treaty was signed on 26 March 1928. It concerned a short section of boundary measuring about 30 km (18 m) between the Api and Raya peaks. In this section the boundary is trending northwards towards its western terminus, and it is cutting across the grain of the low ranges, which still have a northeast-southwest axis. The watersheds between some rivers flowing to the coast east and west of point Datu are low and it seems likely that settlement extending westwards along the valleys had spilled over these watersheds in such cases. This seems to be the most likely explanation for the cession of about 100 sq. km (38 sq. m) by the Netherlands in the upper Separan and Berunas valleys. This boundary was marked by fifteen wooden and four cement pillars, and the location of these was marked on a map at a scale of 1:50 000.

There were some problems along this border during the period of confrontation between Indonesia and Malaysia and fighting between regular and irregular units occurred. However, since the end of that trauma relations between the two countries have improved and no recent problems have been reported in this borderland.

United Kingdom, Foreign Office (1891–2), *British and Foreign State Papers*, vol. 83, H.M.S.O., London.
Tarling, N. (1971). *Britain, the Brookes and Brunei*. Kuala Lumpur.
Wright, L. R. (1970). *The origins of British Borneo*. Hong Kong.


Area ceded by Dutch in 1928 Convention
0 5 Miles
0 8 Km.
G. Raya
S. Tubah
S. Separan
S. Berunas
G. Jagoi
S. Serikin
G. Brunei
G. Api
P. Gaya
Kota Kinabalu
Sea
P. Labuan
Brunei Bay
Bandar Seri Begawan
T. Baram
B. Terusan
S. Limbang
S. Padas
G. Moeloek
S. Sedalir
Labang
Agisan
S. Serudong
P. Sebatik
S. Sebuku
S. Sembakung
Apo Duat Range
B. Baram
BRUNEI
China
Bintulu
B. Kemena
South
T. Sirik
B. Mukah
B. Rajang
Sibu
T. Datu
T. Sipang
S. Separan
S. Sambas
Sambas
G. Raya
G. Api
Kuching
B. Lupar
B. Sadong
S. Kanowit
S. Mengiong
Kapuas Hulu Range
G. Lawit
P. Iran
P. Bawui
S. Kajan
S. Bahau
S. Kelai
S. Mahakam
S. Sai
S. Kapuas
S. Kerungau
S. Landak
CELEBES SEA
1 S. Berunas
2 S. Pensiangan (S. Lagungan)
3 S. Agisan
4 S. Sebuda
A — B Boundary defined by Agreement 28 Sept. 1915
0 50 100 150 Miles
0 50 100 150 200 Km.

Selected list of place names with Pinyin equivalents

	Pinyin	Map Ref.	
Aigun, *see* Ai-hui			
Ai-hui	Aihui	2	A2
A-k'o-su	Aksu	4	B3
A-k'o-su Ho (river)	Aksu He	4	B3
Aksai Chin	Aksayqin	16	AB1–2
Aksu, *see* A-k'o-su			
Aksu Yangi Shahr, *see* A-k'o-su			
Ala Shan Desert	Alishan	1a	D2
Altai Mountains	Altay Shan	1a	C2
Antung, *see* Tan-tung			
Argun	Ergune	2	A2
Baytag Bogd Uul (mts), *see* Pei-ta Shan			
Boro Horo Ula (mts)	Boro horo Shan	4	C3
Burchum River, *see* Pu-erh-ching Ho			
Chahar (region)	Qahar	6	D2
Chan-chiang	Zhanjiang	1d	B3
Ch'ang Chiang (river)	Chang Jiang	1b	A2–3
Chiao-hsien	Jiao Xian	1d	B2
Chuguchak, *see* T'a-ch'eng			
Dalai Nor, *see* Hu-lun Ch'ih			
Demchok	Demqo	16	B3
Erh-lien-hao-t'e	Erlianhaote	6	C2
Fu-shun, *see* Fu-sung			
Fu-shun-ch'eng	Fushuncheng	34	A2
Fu-sung	Fusong	34	B1
Fu-yuan	Fuyuan	5	A2
Gartok, *see* Ka-erh			
Hai-nan Tao (island)	Hainan Dao	29	D3
Hei-lung Chiang (river)	Heilong Jiang	5	ABC2
Herlen (river)	Herlun He	3	C3
Ho-chiang Chuan-ch'u (special area)	Hejiang	5	A2
Ho-erh-kuo-ssu Ho (river)	Korgas	4	B3
Hong Kong	Xianggang	33	
Hsi Chiang (river)	Xi Jiang	1b	B3
Hsi-meng	Ximeng	25	B2
Hsin-chiang Wei-wu-erh Tzu-chih-ch'u (auton. region)	Xinjiang Uygur Zizhiqu	16	BC1
Hsing-k'ai Hu (lake)	Xingkai Hu	2	B3
Hsi-tsang Tzu-chih-ch'u (auton. region)	Xizang Zizhiqu	16	
Huang Ho (river)	Huang He	1b	A2
Hu-lun Ch'ih (lake)	Hulun Chi	6	D1–2
Hun-chiang (river)	Hunjiang	34	A2
Hun-ch'un	Hunchun	34	C1
Hung-chi-la Shan-k'ou (pass)	Kunjirap Daban	15	B2
I-ning	Yining	4	B3
Jih-t'u	Ruto	16	B2
Ka-erh	Gar	16	B3
K'a-la-k'un-lun Shan-k'ou (pass)	Karakorum Shankou	15	D3
Karakorum Pass, *see* Ka'-la-k'un-lun Shan-k'ou			
K'a-shih-ka-erh Ho (river)	Kaxgar He	4	A4
Khabarovsk	Chabarovsk	5	C2
Khan-Tengri (peak)	Hantengri	4	B3
Kizil River, *see* K'a-shih-ka-erh Ho			
Kok Su, *see* K'u-k'o-shui Ho			
K'u-k'o-shui Ho (river)	Kekesu He	4	B3
Kong-ming Shan (mts), *see* K'ung-ming Shan			
Kuang-hsi Chuang-tsu Tzu-chih-ch'u (province)	Guangxi Zhuangzu Zizhiqu	29	CD1
Kuei-chou Sheng (province)	Guizhou Sheng	29	C1
Kuldja, *see* I-ning			
Kum Arik (river), *see* A-k'o-su Ho			
K'ung-ming Shan (mts)	Kunming Shan	24	B3
Kun-lun Shan (mts)	Kunlun Shan	15	CD2
Kwangsi (province), *see* Kuang-hsi			
Kweichow (province), *see* Kuei-chou Sheng			
Kyzylsu (river), *see* K'a-shih-ka-erh Ho			
Lan-ts'ang Chiang	Lancang Jiang	29	A1
Lin-chiang	Linjiang	34	B2
Lung-chou	Longzhou	29	C2
Macau	Aomen	1d	B3
Manass, *see* Ma-na-ssu			
Ma-na-ssu	Manas	4	C3
Man-chou-li	Manzhouli	6	D1
Meng-lien	Menglian	25	C3
Meng-tung, *see* Ts'ang-yuan			
Meng-tzu	Mengzi	29	B1
Monghka, *see* Hsi-meng			
Mongtun, *see* Ts'ang-yuan			
Mu-ssu-t'a-ko Shan-k'ou	Muztag	15	C3
Muztagh, *see* Mu-ssu-t'a-ko Shan-k'ou			
Namja La (pass), *see* Na-mu-cha Shan-k'ou			
Na-mu-cha Shan-k'ou	Namuzha Shankou	17	B1
Nan-ning	Nanning	29	D2
Nu Chiang (river)	Nu Jiang	24	B1–2
Nu Shan (mts)	Nu Shan	1a	C3
O-erh-ku-na Ho, *see* Argun			
Pai-t'ou Shan	Baitoushan	34	B1
Pa-li-chia-ssu, *see* Demchok			
Pangong Lake, *see* Pan-kung Hu			
Pan-kung Hu (lake)	Bangong Co	16	B2
Parigas, *see* Pa-li-chia-ssu			
Pei-ta Shan (mts)	Baytik Shan	6	A2
Pen-ch'i	Benxi	34	A2
P'o-lo-ho-lo Shan (mts), *see* Boro Horo Ula			
Pu-erh-ching Ho (river)	Burqin He	4	C2
P'u-lan	Busheng	16	C4
Red River, *see* Yuan Chiang			
Rudok, *see* Jih-t'u			
Shen-ch'uan, *see* Shumchun			
Shumchun	Shenzhen	33	B1
Siang Chiang, *see* Yu Chiang			
Sinkiang, *see* Hsin-chiang			
So-ch'e, *see* Yeh-erh-ch'iang			
South China Sea	Nan Hai	36	
Sui-lai, *see* Ma-na-ssu			
Sung-hua Chiang (river)	Songhua Jiang	2	AB2
T'a-ch'eng	Tacheng	4	B2
T'a-li-mu P'en-ti (basin)	Tarim Pendi	1a	C2
Tan-tung	Dandong	34	A2
Tarbagtai, *see* T'a-ch'eng			

	Pinyin	Map Ref.	
T'ien Shan (mts)	Tian Shan	4	B3
T'o-shih-kan Ho (river)	Toxkan	4	B3
Ts'ang-yuan	Cangyuan	25	B1
Wu-su-li Chiang	Wusuli Jiang	5	B2–3
Ya-lu-ts'ang-pu Chiang (river)	Yarlung Zangbo Jiang	1a	C3
Yangtze River, *see* Ch'ang Chiang			
Yarkand, *see* Yeh-erh-ch'iang			
Yarkand River, *see* Yeh-erh-ch'iang Ho			
Yeh-erh-ch'iang	Yarkant	4	B4
Yeh-erh-ch'iang Ho	Yarkant He	15	CD2
Yellow Sea	Huang Hai	34	A3
Yuan Chiang	Yuan Jiang	29	BC1–2
Yu Chiang (river)	Yu Jiang	29	D1
Yunnan province, *see* Yun-nan sheng			
Yun-nan sheng	Yunnan	29	B1

Gazetteer

A	Map Ref.		Lat.	Long.
Abagaytuy, U.S.S.R.	3	D3	49.35N	117.49E
Abakan R, U.S.S.R.	3	A2	53.43N	91.30E
Ab-e-Vakhan (river), Afghan. *see* Vakhan, Ab-e	14	A3	37.00N	72.40E
Ab-i-Kaisar (river), Afghan. *see* Qeysar	8	B2	36.13N	64.42E
Ab-i-Panja (river), Afghan./U.S.S.R.	7	D2	37.06N	68.20E
Adam Ulan, U.S.S.R.	8	A2	35.54N	61.26E
Adirampatnam, India	35	B1	10.21N	79.24E
Agisan, Indon.	44	C2	4.16N	116.47E
Agisan, Sungai (river) E.Malay./Indon.	44	C2	4.11N	116.58E
Agra, India	1c	B3	27.09N	78.00E
Ag-Su (river), U.S.S.R., *see* Aq-su	7	D1–2	38.09N	73.57E
Aigun, China *see* Ai-hui	2	A2	50.16N	127.28E
Ai-hui, China	2	A2	50.16N	127.28E
Aitape, P.N.G.	41	C1	3.06S	142.22E
Ajnala, India	20	B2	31.54N	74.47E
Akcha, Afghan.	7	B2	36.56N	66.11E
Akhaura, Bangla D.	22	C3	23.52N	91.12E
A-k'o-su, China	4	B3	41.09N	80.15E
A-k'o-su Ho (river), China	4	B3	40.28N	80.52E
Ak Sai R, U.S.S.R., *see* Aksay R.	4	B3	41.08N	80.11E
Aksai Chin (region), China/India	16	AB1–2	35.08N	79.45E
Aksay R., U.S.S.R.	4	B3	41.08N	80.11E
Aksu, China, *see* A-k'o-su	4	B3	41.09N	80.15E
Aksu Yangi Shahr, China	4	B3	41.09N	80.15E
Ala Shan Desert, China	1a	D2	40.00N	104.00E
Alatau Range, U.S.S.R., *see* Dzhungarskiy Alatau	4	B2	45.00N	80.00E
Alma-Ata, U.S.S.R.	4	A3	43.15N	76.57E
Alor, Pulau (island), Indon.	38	A2	8.15S	124.45E
Altai Mountains, China/U.S.S.R.	1a	C2	48.00N	90.00E
Amakono (tribal area), Indon.	40	B3	9.32S	124.15E
Amanab, P.N.G.	41	B1	3.36S	141.13E
Amazar (river), U.S.S.R.	2	A1	53.27N	122.03E
Amboina Cay (island) S.China Sea, *see* Amboyna Cay	36	E1	7.52N	112.55E
Amboyna Cay (island), S.China Sea	36	E1	7.52N	112.55E
Ambunti, P.N.G.	41	C2	4.14S	142.51E
Am fuang (tribal area), Indon.	40	B2	8.28S	124.05E
Amgun (river), U.S.S.R.	2	B1	52.56N	139.38E
Amiran (plain) Afghan.	10	B2	30.40N	62.10E
Amnok-kang (river), N. Korea, *see* Yalu River	34	A2	39.55N	124.20E
Amritsar, India	20	B2	31.43N	74.54E
Amu Darya (river), Afghan./U.S.S.R.	8	D1	43.40N	59.01E
Amur River, U.S.S.R.	5	ABC2	52.56N	141.10E
Analai Tivu (island), Sri Lanka	35	B1	9.41N	79.46E
Anamba Islands, Indon., *see* Anambas	36	C2	3.00N	106.00E
Anambas, Kepulauan (islands), Indon.	36	C2	3.00N	106.00E
Andaman Sea	26		10.00N	95.00E
Andkhvoy, Afghan.	8	C2	36.56N	65.08E
Angamarut, P.N.G.	41	B3	6.20S	141.00E
Angara R., U.S.S.R.	3	B2	58.06N	93.00E
Ange R., India	18	C1–2	28.47N	95.50E
Anjar, India	19	C2	23.10N	70.02E
Antung, China, *see* Tan-tung	34	A2	40.08N	124.24E
Api, Gunong (mt), E.Malay./Indon.	44	Inset	1.16N	110.03E
Apo Duat, Pegunongan (mts), E. Malay., *see* Apo Duat Range (Indon.)	44	C2	3.45N	115.40E
Aq Chah, Afghan., *see* Aqcheh	7	B2	36.56N	66.11E
Aqcheh, Afghan.	7	B2	36.56N	66.11E
Aq Ribat, U.S.S.R.	8	A2	35.30N	61.42E
Aq Su (river), U.S.S.R.	7	D1–2	38.09N	73.57E
Arabian Sea	11		24.40N	64.00E
Arafura Sea, Indon.	38	C2	9.00S	133.00E
Arakan Yoma (mts), Burma	23	B3	19.00N	94.40E
Arakhadain Usu (river), U.S.S.R.	3	C3	49.57N	108.00E
Aral'skoye More (sea), U.S.S.R.	1a	AB2	45.00N	60.00E
Arandu, Pak.	11	C2	35.19N	71.33E
Aranyaprathet, Thailand	29	B3	13.41N	102.30E
Argun R., U.S.S.R.	2	A2	53.20N	121.28E
Arnawai, Pak., *see* Arandu	11	C2	35.19N	71.33E
Arnawai R., Afghan., *see* Bashgal R.	11	C2	35.20N	71.32E
Aru, Kepulauan (islands), Indon.	38	C2	6.00S	134.30E
Arun R., Nepal	17	D2	26.49N	87.09E
Ashinga, R., U.S.S.R.	3	C3	49.10N	109.48E
Ashmore Reef, Aust.	38	A3	12.14S	123.05E
Asmar, Afghan.	11	C2	35.02N	71.22E
Assam (state), India	23	B1	26.00N	92.00E
Atambua, Indon.	40	C2	9.07S	124.54E
Atapupu, Indon.	40	C2	9.00S	124.51E
Atauro, Ilha de (island), Port. Timor	38	B2	8.13S	125.35E
Atirampattinam, India	35	B1	10.21N	79.24E
Atouat Plateau, Laos	30	C2–3	16.01N	107.23E
Attapu, Laos	30	B3	14.48N	106.50E
Ayam, Tanjong (point), W.Malay.	37	D2	1.20N	104.12E
B				
Babar, Pulau (island), Indon.	38	B2	7.55S	129.45E
Babi, Tandjung (point), Indon.	37	C2	1.11N	104.06E
Badakhshan, (admin.div.), Afghan.	7	C2	36.45N	72.00E
Badin, Pak.	19	A1	24.39N	68.50E
Bahau, Sungai (river), Indon.	44	C2	2.34N	116.20E
Bahraich, India	17	B2	27.34N	81.36E
Bahu Kalat (region), Iran	12	A4	25.40N	61.30E
Baikal (lake), U.S.S.R., *see* Baykal	3	C2	54.00N	109.00E
Bajaur (region), Pak.	11	C2	34.50N	71.40E
Bakharz (region), Iran	9	B2	35.00N	61.00E
Bakhty, U.S.S.R.	4	B2	46.39N	82.42E
Balabac Island, Phil.	42	A4	7.59N	117.06E
Balabac Strait, Phil.	42	A4	7.30N	116.40E
Bala Morghab, Afghan.	8	B2	35.35N	63.20E
Baliari, Pak.	19	B1	24.20N	69.38E
Balibo (tribal area), Port.Timor	40	D2	8.58S	125.03E
Balkhash, Oz. (lake), U.S.S.R.	4	A2	46.00N	74.00E
Baluchistan (region), Pak.	11		28.00N	63.00E
Bampusht (region), Iran	12	B3	26.40N	62.50E
Ban Chai Buri, Thailand	28	B2	17.39N	104.27E
Banda, Laut (sea), Indon.	38	B2	5.00S	128.00E
Banda Atjeh, Indon.	36	A1	5.34N	95.20E
Bandar-i-Khomai Khan, Afghan., *see* Kamal Khan, Bandar-i	10	B2	30.18N	61.53E
Bandar Seri Begawan, Brunei	44	C2	4.53N	114.56E
Banda Sea, Indon., *see* Banda, Laut	38	B2	5.00S	128.00E
Bandi Pass, Iran	13	A2	29.32N	60.59E
Bandi-i-Sistan (dam), Afghan., *see* Sistan, Band-i	10	B2	30.45N	61.54E
Bang Chrum (prov.), S. Viet.	32b	B1	11.35N	106.20E
Banggi (island), E.Malay.	42	A4	7.15N	117.10E
Bangkok, Thailand	26	C3	13.45N	100.31E
Bangla Desh, Peoples' Rep. of	22		24.00N	90.00E
Banks Island, Aust.	39	B2	10.11S	142.16E
Ban Me Thuot, S.Viet.	30	C3	12.40N	108.05E
Bannu, Pak.	11	C2	32.59N	70.36E
Bao R., S. Viet.	32b	B2	11.10N	106.08E
Bao Loc, S.Viet.	31	C3	11.32N	107.48E
Barak, Batang (river), E.Malay.	44	C2	4.36N	113.59E
Baralia N. (river), India	18	B2	26.16N	91.22E
Baram, Tanjong (cape), E.Malay.	44	B2	4.36N	113.58E
Bari Doab, (region), Pak.	20	AB3	30.25N	74.00E
Barisal (admin.district), Bangla D.	22	B3	22.30N	90.20E
Barisan, Pegunungan (mts), Indon.	1b	A4	3.00S	102.15E
Basak, Laos, *see* Champasak	30	B3	14.53N	105.52E
Bashgal R., Afghan.	11	C2	35.20N	71.32E
Basilan (island), Phil.	42	C5	6.40N	121.59E
Basilisk Passage, Aust.	39	B2	9.49S	142.56E
Bassac, Laos	30	B3	14.53N	105.52E
Batala, India	20	C2	31.48N	75.17E
Batam, Pulau (island), Indon.	37	C3	1.05N	104.03E
Batan Islands, Phil.	42	B1	20.30N	121.55E
Batdambang, Cambodia	28	B3	13.06N	103.12E
Batek, Pulau (island), Indon.	40	B2	9.16S	123.59E
Bathurst Island, Aust.	38	C3	11.45S	130.41E
Batoe Poetih, Tandjoeng (cape), Port. Timor, *see* Bato Putik	38	B2	8.45S	126.49E
Bato Putik, Ponta (cape), Port. Timor	38	B2	8.45S	126.49E
Battambang, Cambodia, *see* Batdambang	28	B3	13.06N	103.12E
Baucama, Mota (river), Indon., *see* Baukama	40	D2	9.03S	125.00E
Baukama, Mota (river), Indon.	40	D2	9.03S	125.00E
Bawlake, Burma	26	B1	19.11N	97.21E
Bawui, Pegunungan (mts), Indon.	44	C3	1.39N	114.53E
Baykal, Oz. (lake), U.S.S.R.	3	C2	54.00N	109.00E
Baytag Bogd Uul (mts), Mongolia/China	6	A2	45.15N	90.50E
Be, Song (river), S. Viet.	31	B3	11.06N	106.58E
Beani Bazar, Bangla D.	22	C2	24.50N	92.10E
Beas R., India	20	C2	31.12N	75.00E
Bebuki (tribal area), Indon.	40	C2	9.15S	124.35E
Bedel, Pereval (pass), U.S.S.R.	4	B3	41.26N	78.26E
Bedok, Tanjong (point), Singapore	37	C2	1.19N	103.59E
Belakangpadang, Pulau (island), Indon.	37	B3	1.08N	103.53E
Bengal, Bay of	23	A3	15.00N	90.00E
Ben Luc, S.Viet.	32b	B3	10.39N	106.29E

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Text set in 9 pt. Helvetica on 11 pt. body.