CHAPTER 1

PROBLEMS OF INTERNATIONAL BOUNDARIES
WITH PARTICULAR REFERENCE TO THE BOUNDARY
BETWEEN INDONESIA AND PAPUA NEW GUINEA

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The relations between modern states reach their most critical stage in the form of problems relating to territory (Hill 1976:3).

There are no problems of boundaries. There are only problems of Nations (Ancel 1938:196).

These two quotations emphasize the importance of boundary questions and the fact that they are one part of the totality of states' relationships. It would be equally true to say that there is no boundary disagreement which could not be readily solved given goodwill on both sides, and that there is no boundary which would not furnish a cause of dispute if one country wished to force a quarrel on another.

This essay is divided into three main sections. First, a short introductory passage identifies the principal types of boundary disputes. Secondly, each of these categories is examined in detail, and their occurrence in the borderland between Indonesia and Papua New Guinea is considered. Thirdly, the conclusions of the second section are listed.

Throughout this essay the terms boundary and border are used in their precise senses. A boundary is a line and a border is a zone in which a boundary is located. It would be possible to define the width of the border according to a number of different criteria; if a particular border was defined by an economist, an anthropologist, a geomorphologist and a general, it would be surprising if all the limits selected coincided.
The principal types of boundary disputes

The general term boundary dispute includes four distinct kinds of disagreements between countries. Territorial boundary disputes occur when one country finds part of the territory of an adjoining state attractive and seeks to acquire it. Somalia’s claim to the Haud and Ogaden areas of Ethiopia and Guatemala’s claim to Belize provide examples of such disputes. Positional boundary disputes occur when there is a disagreement over the exact location of the boundary, probably because of a controversy over the interpretation of a phrase in a treaty or over the correct intention of parts of previous agreements. The disagreement between China and Russia over the course of their boundary in the vicinity of the confluence of the Amur and Ussuri Rivers, and the quarrel between Argentina and Chile concerning the location of their common boundary in the Beagle Channel provide examples of positional boundary disputes. In territorial and positional disputes success for the claimant state will involve a change in the position of the boundary and therefore the transfer of some territory from one country to another. The amount of territory involved would usually be less in the case of a positional dispute than in the case of a territorial dispute.

Governments will normally find it most convenient to apply certain functions, relating for example to immigration and trade, as close to the international boundary as possible. Sometimes the nature of these functions or the manner in which they are applied may give a neighbouring country cause for grievance. Disagreements of this kind can be called functional boundary disputes. Iraq’s occasional interference with Iranian shipping on the Shatt-el-Arab and Benin’s closure of boundary crossing points into Togo in October 1975 typify such boundary disputes. Because boundaries are lines they will often intersect discrete resources such as rivers or an oil field which the countries on both sides of the boundary will wish to use. Conflict over the use of such features form a separate category of resource boundary disputes. The quarrel between India and Bangladesh over the diversion of Ganges waters at the Farraka Barrage is representative of this kind of boundary dispute. In resource and functional boundary disputes the claimant state can be successful without any alteration in the location of the boundary; in each case what is sought is an agreed set of regulations which will alleviate the administrative problem.

Territorial boundary disputes

Territorial boundary disputes can be divided into two main clas-
ses. First there are legal disputes when the claimant country insists that the territory desired is improperly owned by its neighbour. The Philippines’ abandoned claim to part of Sabah and Kampuchea’s claim to the temple of Preah Vihear in Thailand, which was upheld by the International Court of Justice in 1962, were both territorial claims based on legal grounds. Secondly, there are all the other cases when a country asserts that it would be more appropriate if part of its neighbour’s territory passed to its own sovereignty. Lesotho’s claim to part of South Africa and the Argentine’s claim to the Falkland Islands are typical of this large group of territorial boundary disputes. There are many grounds on which countries will make claims against the territory of neighbours; the arguments will be based in history, in geography, in economics, and in ethnology. Usually the claim will be buttressed by as many different arguments as possible. For example, Afghanistan’s persistent territorial claim to parts of western Pakistan, which is thinly veiled as support for a separate state of Pushtunistan, has at least four strands. First there are the legal and moral arguments that Afghanistan was forced to sign the 1893 agreement, which produced the Durand Line, under duress. Secondly, historical arguments are deployed to demonstrate that Afghanistan once ruled over areas of west Pakistan, and it is true that the Durrani Empire controlled some of the claimed area for seventy-six years prior to 1823, when Peshawar was lost. The third set of arguments is based in the witness of ethnologists that Pathans in Afghanistan and Pakistan form a single cultural group. Finally, it is asserted on geographical grounds that the proper boundary of the Afghanistan uplands lies closer to the Indus River, along the Sulaiman Range.

Although in most cases when territorial disputes originate the claimant state genuinely hopes and expects to acquire additional territory, there are cases when territorial claims are made to serve some domestic or international policy. Presidents Nkrumah and Amin, at different times, have made claims against Togo and Tanzania respectively, when it was obviously useful to distract attention from pressing domestic problems of an economic and political nature. When the Philippines claimed parts of northern Sabah it was suggested by some observers that the chief design was to delay the formation of Malaysia.

When the border between Indonesia and Papua New Guinea is considered there does not appear to be any likely territorial claim from either side. The agreement between Australia and Indonesia on 12 February 1973 fixed the boundary in a clear manner which does not
allow any territorial claims. However, it should not be assumed that a claim could not be manufactured by either side if changed political circumstances warranted it. Once it was fashionable to classify boundaries into two major classes called artificial boundaries and natural boundaries. Artificial boundaries included those which did not correspond with any of the major divisions of the physical or cultural landscape, while natural boundaries were distinguished by their coincidence with rivers or watersheds or lines of tribal separation. The fashion was abandoned because it was recognized that it was still necessary to select a specific line within the river or the watershed or the frontier between two tribes. This realization underlines the point that in the vicinity of a boundary there will be other limits which will be more or less obvious. Some will concern the physical landscape of plants, geological structure and hydrology, while others will relate to human occupancy and include differences in language, systems of land tenure, and patterns of trade. Because the present boundary formed by the two meridians and the Fly River does not correspond consistently with possible physical and human divisions in the border it would be possible for either country, by emphasizing one of these dividing zones, to call for a rectification of the boundary.

There is a number of changed political circumstances which might persuade a country to challenge the location of a settled boundary. For example, there might be a desire to provide an external focus for national sentiment at times of difficult economic conditions; or the temptation to take advantage of a weakened neighbour might prove irresistible; or it might be decided to raise the boundary issue to show displeasure with some policies or attitudes being adopted by the adjoining state.

It must also be recognized that population distributions sometimes change, and if alien settlement occurs on a significant scale across a boundary it can later provide the ground for a demand to redraw the boundary. It was the major immigration of Chilean workers to the guano and nitrate fields of southern Bolivia which strengthened Chile’s determination to acquire that area.

Fortunately, in the case of the border between Indonesia and Papua New Guinea there is no evidence that either country has the slightest wish to raise territorial claims against the other. It must also be a matter of satisfaction to both governments that their maritime boundaries have been settled. Maritime claims have been a fruitful source of discord in a number of regions, but that risk has been avoided
by Indonesia and Papua New Guinea. The boundary in the Arafura Sea was settled by Australia and Indonesia in 1971 and 1973 on terms which proved entirely acceptable to the independent government of Papua New Guinea. On 9 September 1983 Indonesia and Papua New Guinea extended the short boundary which Australia and Indonesia had agreed in 1971 into the Pacific Ocean. That boundary has now been fixed to separate the seabed and exclusive economic zones claimed by the two countries, to a distance of 200 nautical miles from the nearest land. It was based on equidistant principles.

*Positional boundary disputes*

While the basic cause of territorial boundary disputes is superimposition of the boundary on the cultural or physical landscape, which allows one or both sides to canvass the greater merit of alternative lines, positional boundary disputes arise because the evolution of the boundary is incomplete. It is a defect in the definition of the boundary, in a text, on a map or in the landscape, which is critical in the case of positional disputes. They will often arise during the process of demarcation when joint survey teams are striving to match the boundary defined in a treaty text with the features of the landscape. For example, the Anglo-Persian treaty of 1896 stipulated that the boundary between the areas now known as Iran and Pakistan would follow the Tahlab River to its junction with the Mirjawa River. Eight years later it was discovered that Tahlab and Mirjawa are two names for the same river and there is no point where usage changes from one to the other. Often the problems arise because the boundary was defined by diplomats in imperial capitals, working with inaccurate maps. Sometimes the errors arise because of the errors on the map, on other occasions confusion is created because the diplomats tried to make assurance doubly sure and defined a single point in two ways which were found later to be quite different. For example, the first boundary between Bolivia and Peru was defined as passing through the confluence of the Lanza and Tambopata Rivers *which lay north of parallel 14 degrees south*. The surveyors had no trouble finding the confluence, but unfortunately it was south of 14 degrees south.

Positional disputes can also arise in situations where a boundary has been demarcated through an unpopulated border which subsequently becomes more intensively used. The movement of new settlers into a border and the use of virgin land close to the boundary
provide an acid test for the completeness and accuracy of the boundary definition and demarcation.

Sometimes positional boundary disputes arise because the line is made to coincide with some unstable feature in the landscape. Some rivers make very poor boundaries because rivers tend to change their course in two ways. First, rivers can change their course gradually, and generally imperceptibly, by accretion and erosion. The downstream migration of meanders falls into this category. Secondly, river courses can be changed suddenly by cutting through the neck of a meander. The first case does not usually call for any special arrangements because over the long term both sides will lose and gain approximately equal areas. However, in the second case the area of land enclosed by the meander is suddenly switched from one side of the river to the other. It is then a nice point to decide whether the boundary follows the new course of the river or continues to follow the abandoned course. The question of river islands can also be difficult because the deposition of silt will sometimes join islands to one of the banks. This latter problem has been particularly serious on the River Mekong where it forms the boundary between Thailand and Laos. The Franco-Thai treaty of 1893 gave France title to all the islands in the river and problems of jurisdiction arose when some of the islands become attached to the Thai bank through the deposition of alluvium. A commission was established in 1926 to rule on all future problems of this nature but the decolonization of Indo-China and the determination of Laos to own all the islands, as France did before it, has caused a fresh round of problems.

Many boundary architects have been deceived by apparently exact representation of rivers on maps and have decided that such precise features would make excellent boundaries. Unfortunately the actual rivers possess a width which makes it necessary to select some particular line within the river. Lines which can and have been used in rivers include the bank, the line of equidistance or median line, and the thalweg. If a bank is used then the entire river belongs to a single country, but an added advantage is that water levels change and so does the position of the bank. Further, the banks of some rivers in very flat country might merge into swamps before reaching firm ground. The median line can be easily constructed if the banks are clearly defined, but of course the line will change in location as the banks are eroded or extended by alluvial disposition. Further, the median line might intersect the navigable channel of the river and create problems for com-
mercial use. The thalweg is the line of the deepest continuous channel in the river. While this line will also change it does mean that countries on both sides will be able to claim navigation rights for their citizens.

Turning now to the boundary between Indonesia and Papua New Guinea it seems that the only scope for a positional boundary dispute concerns the section of the Fly River used for the international boundary. The meridians north and south of the Fly River have been marked by ten and four monuments respectively. The maximum distance between any two markers is the 56 nautical miles between monuments MM11 and MM12 (see figure 1.1). Such a distance would mean that it would be difficult for a person to know exactly where the boundary lay in the intervening area, but it is understood that all major tracks have been signposted and the exact location of each adjacent village has been computed. Modern survey techniques would make it a comparatively easy matter to fix more monuments on the line if that was deemed essential. The 1973 agreement defines the boundary along the Fly River as *the waterway*, which is shown in parentheses to be the thalweg. The distance between monuments MM10 and MM11, which mark the termini of the section of the Fly River which forms the boundary, is 34 nautical miles, but the course of the river will be much longer because it meanders widely over the flat, marshy plain (see figure 1.2). Maps of the region show very clearly the abandoned meanders along the river’s course, and in some cases the boundary has moved as much as 3.5 kilometres when the neck of a meander was breached (see the meander marked B on figure 1.3). The map evidence suggests that the Fly River has an unstable course which makes it unsuitable for use as an international boundary. If the border in the vicinity of the river ever became intensively used it would prove to be a very difficult line to monitor.

An early feasibility study of the Ok Tedi mining project in the Star Mountains of Papua New Guinea recommended that meanders should be breached in an effort to improve the opportunity for barge navigation on the river. Unfortunately it will prove a very difficult and expensive engineering operation to contain the Fly River between fixed banks. The river’s catchment in high mountains with heavy rainfalls generates a large sediment load, which cannot be carried when the low gradients are reached south of parallel 6 degrees south.
FIGURE 1.1 The boundary between Indonesia and Papua New Guinea
FIGURE 1.2 The Fly River section of the boundary
FIGURE 1.3  Section of the Fly River showing course changes
Functional boundary disputes

A functional boundary dispute is created when one country’s authorities decide that national interests have been adversely and unfairly affected by the activities of a neighbouring country along the boundary. These activities will obviously be concerned with movement across the boundary of people, or stock, or goods, or ideas, and the complaint can take two major forms. In the first case the plaintiff state might consider that its neighbour is unreasonably interfering with trans-boundary movements. For example, Pakistan, in retaliation against Afghanistan’s support for the Pathan secessionist movement, required Powinda herders to produce certificates of health for their animals before admitting them on their annual transhumance movement to the Indus plains at the beginning of winter. It proved impossible to satisfy this new regulation and the Powindas and their herds had to winter in Afghanistan. More recently Tanzania has prevented Kenyan lorries from operating between Kenya and Zambia along the roads through the west of Tanzania. Tanzania claims that this heavy traffic is damaging its unsealed roads; Kenya believes that Tanzania is unwilling to see Zambia’s dependence on Dar es Salaam reduced. The imposition of tariffs is another device by which one country can hinder trans-boundary trade; while the withholding of work-permits is one method of obstructing immigration into a country.

In the second case the plaintiff country might be dissatisfied because its neighbour is not preventing illegal trans-boundary movements. For example, in the last year the export earnings of both Uganda and the Central African Empire were seriously reduced because diamonds, cotton, cocoa and coffee were smuggled out and sold in neighbouring countries. Countries might also complain if a neighbour fails to enforce health standards which result in animal or human diseases being introduced across the boundary, or fails to prevent a flood of refugees into the plaintiff’s part of the border. Some of the most serious functional boundary disputes arise when one country fails to prevent its border being used as a base for dissidents attacking the authority across the boundary. Such attacks may be launched as military campaigns in the style of the POLISARIO raids into Mauritania from Algeria, or they may simply be propaganda attacks by radio transmitters.

Functional boundary disputes have not attracted the interest of scholars to the same extent as territorial or positional disputes. This
situation may be due either to the prompt settlement of most functional disputes or to the fact that serious and persistent functional disputes occur only between hostile countries which display their antagonism in more obvious and often more threatening ways. It seems likely that the chance of functional disputes developing will be greatest when the traffic across the boundary is mainly in one direction, whether it is legal or illegal. This is because in such situations there will be little or no opportunity for retaliation by the plaintiff state. If there is a flourishing traffic in both directions across the boundary any country which considers itself to be adversely affected by its neighbour’s actions in the border can adopt similar measures. The introduction of new regulations or the more stringent application of existing rules which precipitate functional disputes, will often be made for sound strategic or economic reasons. However, it is also possible that they may be introduced or intensified in order to show displeasure with the policies or attitudes of a neighbouring country.

While it is possible that functional boundary disputes will arise between the two countries, the chances have been significantly reduced by the agreement on border arrangements which the two governments concluded in October 1984. An agreement on administrative border arrangements had been reached by Australia and Indonesia on 26 November 1974 and Article 13 of that agreement required it to be reviewed in 1979. The review was undertaken during that year and an agreement of twenty articles was signed in December 1979. This agreement was in turn reviewed (as required by Article 19) in 1984 and a new agreement, of twenty-two articles, was signed in October 1984.

This agreement has no effect on the location of the boundary; it is concerned with the functions of governments in the border, and it is designed to avoid problems and to provide mechanisms for solving any problems which do occur.

The border area, within which residents on both sides have certain rights and responsibilities, is defined as the Kecamatan-kecamatan Perbatasan in Indonesia and the census divisions of Papua New Guinea which extend to the boundary. It has been agreed that both sides will produce maps of their section of the border area and that the area can be changed after consultation.

Articles 4, 5 and 9 deal with the indigenous population of the border area. Those residents are entitled to cross the boundary for traditional activities associated with social contacts and ceremonies such as marriages or funerals. They are also permitted to cross the boundary
to carry out farming, hunting and fishing under the terms of traditional rights held in areas of land or water in the neighbouring state. The articles conferring these rights stipulate that such crossings will only be of a temporary nature and must not involve permanent resettlement. In order to reduce the chance of future problems both countries have agreed to discourage the construction of new villages within 5 km of the boundary. This is not an absolute prohibition but special approval is required from the government concerned before such settlements can be established.

Cross-boundary customary trade will be facilitated by the two governments, although it is restricted to residents of the border area to satisfy their needs and it may not include items prohibited by either government.

Crossing of the boundary by people who do not reside in the border area, and by those residents not engaged in traditional activities, is regulated by Article 6. This article provides for the designation of crossing points and the exchange of information about migration laws and policies between the two governments.

Other articles describe actions which governments must take. For example, Article 7 requires both governments to prevent any part of their territories, in or near the border area, from being used for hostile or illegal actions against the other. The authorities have agreed to cooperate if any disaster or major accident occurs in the border area and to promote the maintenance and extension of air, road and radio communication across the boundary. Finally, Article 12 deals with the continuance and development of cooperation to prevent dangerous plant, animal and human diseases from crossing the boundary.

Articles 2 and 3 deal with the mechanism which will keep the agreement running smoothly. A joint Border Committee of senior officials will meet at least once a year to produce guidelines for the effective implementation of the agreement and to review the success of cooperation. Arrangements are also made for liaison between officials at various levels of national and local administration.

This mechanism was tested in April 1983 when surveyors of Papua New Guinea discovered that the trans-Irian Jaya highway appeared to cross into Papua New Guinea in two places. The highway, which is being built by Japanese contractors, appeared to cross the boundary twice, a few miles south of parallel 8 degrees south. One section of road was reported to be 3.5 km long and to have penetrated 0.5 km into Papua New Guinea; the other section was 4.5 km in length and penet-
rated 1.5 km. The country in this region is low and swampy and Papua New Guinea's member for North Fly, Mr Warren Dutton, told news-
men that he believed the roadbuilders had been following the top of a
ridge which led them into Papua New Guinea. There were no bound-
ary markers in this area.

A meeting of officials was organized in Merauke within a week. It
lasted three days and arrangements were made for satellite fixings of
the road near the border to be made on 11 and 12 May 1983. A more
detailed survey was arranged for August 1983 and it was agreed that
the entire boundary line would be resurveyed in three sections by 1985.
Despite the attempts of some politicians in Papua New Guinea to
make political capital out of these events, the matter was handled
calmly and swiftly by both governments. The offending sections of the
road were formally closed in August 1984. It was a joint performance
which augurs well for the future.

Resource boundary disputes

Not all trans-boundary resources will provide possible causes of
resource boundary disputes. For example, it is unlikely that a valuable,
pure stand of hardwoods which straddled the boundary would cause
any difficulties, providing the exact position of the boundary was
known. The mining of ore bodies in the border will only call for coop-
eration and discussion when the construction of shafts and galleries
might produce drainage or flooding problems for a mine on the other
side of the boundary. The most common source of resource boundary
disputes are water bodies, such as lakes or rivers, which mark or cross
the boundary. Two main cases can be distinguished. First, there are
those situations where the boundary is drawn through the lake or along
the river. In that case each state has equal access to the same stretch of
the river or lake for navigation, fishing, water supplies and irrigation.
It is usual for treaties producing such boundaries to stipulate that each
side has equal rights to use the river or lake, but that such use must not
be to the detriment of the other user. Plainly any country which allows
a breakwater to be constructed into a river without consultation with
its neighbour runs the risk of fomenting a dispute if the altered flow of
the water begins to erode the neighbour's bank. Equally it would be
against the terms of the general clause described above if one country
allowed developments along a tributary of a boundary river to pollute
that boundary river and perhaps spoil the fishing for people on both
banks.
The second situation arises when the river basin is divided by the boundary and the states have successive use of the waters. In such a situation the downstream state can adversely affect the upstream country by building a dam which floods back into the neighbour's territory. Such flooding will reduce the neighbour's capacity to use that land. The construction of the Aswan High Dam resulted in flooding in the Sudanese border and the Egyptian government agreed to share the cost of resettling those villagers whose lands were inundated. The downstream country can be adversely affected if the upstream state builds a dam which alters the regime of the river or diverts large volumes for irrigation, which reduces the flow in the lower sections. When Kariba Dam was built it was necessary for what are now Zambia and Zimbabwe to guarantee a minimum flow along the Zambeze into Mozambique. Many international agreements have been reached to deal with the successive ownership of rivers; the Indus Waters Agreement shows that even countries which exhibit a high level of mutual suspicion, such as India and Pakistan, can reach a satisfactory solution to this kind of problem.

The other obvious resource which could create problems is a hydrocarbon deposit of natural gas or crude petroleum. Such a deposit, given the right structural conditions could be trapped from either side of the boundary. For this reason most current seabed boundary agreements require consultation between the parties if any hydrocarbon deposit is found to straddle the boundary. In some cases this consultation is required for any deposit found within a set distance of the boundary.

The Indonesian and Papua New Guinea governments were evidently aware of the risks of functional disputes along a boundary which cuts in an arbitrary fashion across the landscape when they negotiated the 1979 and 1984 agreements. Four articles deal with such issues.

First, in Article 13 provision is made for free navigation for nationals of both countries along the Fly River where it forms the boundary. This section is referred to as the Fly River Bulge. Further, provision is made for each government to have the right of navigation along a shared river, for the purposes of a national development project. This provision will be of most use to Indonesia, in respect of the Fly River, but Indonesia seems to have settled for less than it was entitled to under the terms of the fifth article of the 1895 Convention between Britain and the Netherlands. That article guaranteed both parties free navigation on the Fly River except for the carriage of warlike
stores. The latest agreement restricts Indonesian rights to transit navigation for the purposes of a national development project. It is not clear why Indonesia made this concession. The fact that this article would also apply to the Sepik River does not seem adequate compensation, because only quite small craft would be able to reach the border along this river at times of highest flow. It is possible that Indonesia made the concession because the matter was deemed to be one which was too difficult for the government of Papua New Guinea to sell to its electorate.

Article 15 deals with the major development of natural resources. It specifies that governments will keep each other informed when such developments are planned, and the governments have also agreed that they will cooperate with each other to facilitate major developments within either of the countries. The Ok Tedi mining project is nominated as a major development. There is also provision for the exploitation of single accumulations of liquid hydrocarbons or natural gas or any other minerals which straddle the boundary and which can be tapped from only one side. The governments have agreed to consult on the exploitation of the resource and the distribution of profits in an equitable manner.

Article 16 provides that when mining, industrial, forestry, agricultural or other projects are carried out in the border area care will be taken to ensure that pollution of trans-boundary areas does not occur. There is a similar reference in Article 17, which is concerned with the use and conservation of water, forests and wildlife. Such projects will be designed to avoid adverse effects on trans-boundary regions.

Conclusions

This review of the four kinds of boundary disputes suggests a number of conclusions regarding the boundary between Indonesia and Papua New Guinea.

First, the land and sea boundaries have been defined and are free from ambiguity. Further survey is required along the land boundary, and it is encouraging that more detailed work will be completed by 1987. It appears inconceivable, in the present climate of friendly relations between the two countries, that a territorial dispute could develop.

Secondly, the Fly River Bulge appears to be the only sector where positional disputes could occur because of the capacity of that river to
meander across its flood plain. The problems would become more acute if there were major developments in this area, including closer settlement and perhaps the discovery of fields of hydrocarbons.

Thirdly, the recent agreement on border arrangements provides an excellent framework for building enduring good relations in the border. The speed with which the problem of the errant road-builders was solved gives the promise that there will be no serious boundary problems between the two countries in the foreseeable future.