

the opinion of Domino, was necessary because the fall of any single country in the Rimland to the Soviets would have inevitably led to defeat of American interests in the other adjacent countries.

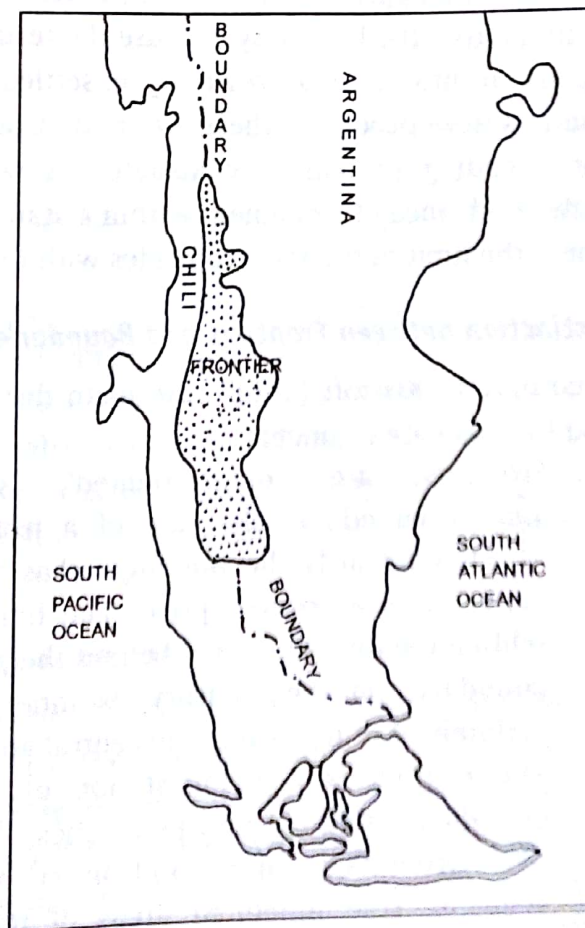
The Rimland Theory has been criticized on the ground of advancement of war technology and nuclear deterrent. It has also been criticized on the ground that Spykman underestimated the role of world community and that of the UNO. Moreover, at present, world is like a village and the international law does not permit any territorial expansion. In fact, state is no longer a living organism in the sense of Ratzel's *Lebensraum*. It is the time of economic imperialism and not that of political colonization.

Boundaries and Frontiers

Boundaries and frontiers have different meanings in geographical literature.

Boundaries are lines demarcating the outer limits of territory under the sovereign jurisdiction of a nation-state. Frontiers, on the other hand, are zones of varying width, separating the ecumenes (fully developed and politically and economically integrated parts) of a given pair of states. These may consist of uninhabited or sparsely populated areas of marginal utility at the current level of technology, so that the states on either side of the frontier may not feel the need to define the precise real limit of their political jurisdiction (Fig. 3.39).

Figure 3.39 Boundary and Frontier between Chili and Argentina



Boundary

As stated above, boundary is a line making the limits of a unit of land or demarcating the outer limits of territory under the sovereign jurisdiction of a state, often a geographical region, but also of economies or societies,

such as a ghetto. Boundaries may be physical or man-made. Physical boundaries follow natural features such as rivers (e.g., the Rio Grande between Mexico and USA), and geometric boundaries follow lines of latitude (e.g., the 49th parallel between the USA and Canada), and longitude (as in large parts of the boundary between Botswana and Namibia).

A distinction is made between *antecedent boundaries* (which demarcate territories before they are settled, like the 49th parallel, or before they have been colonized, as in the case of many African boundaries established by the colonial powers at the Congress of Berlin 1884) and *subsequent boundaries* (which evolve together with the society they encompass).

Frontier

Frontier is that part of boundary which lies on the limit of the settled area. It differs from the boundary because the term 'frontier' indicates outward expansion into an area previously unsettled by a particular state. Some frontiers have occurred where two nations advance from different directions, leading to boundary disputes. A settlement frontier marks the farthest advance of settlement within a state while the political frontier is where the limit of the state coincides with the limit of settlement.

Distinction between Frontiers and Boundaries

According to Kristoff (1958), the main distinctions between boundaries and frontiers are as under:

1. Frontiers are 'outer-oriented', whereas boundaries are 'inner-oriented'. In the case of a frontier, the main attention is directed towards the outlying areas which are both a source of danger and a coveted prize. The hinterland—the motherland—is seldom the directing force behind the pulsations of frontier life. The boundary, on the contrary, is inner-oriented. It is created and maintained at the will of the central government.
2. The frontier is a manifestation of 'centrifugal forces', whereas boundary is that of 'centripetal' ones. This distinction derives respectively from their 'outer' and 'inner' orientation in relation to the ecumene (the inhabited areas of the world as opposed to the non-ecumene which is sparsely populated or not inhabited at all).
3. A frontier is an 'integrating factor' between states on either side; a boundary, on the contrary, is a 'separating factor'. Being a zone of transition between the sphere of one way of life and another, the frontier represents forces which are neither fully assimilated into, nor satisfied with, either state. It provides an excellent opportunity for

mutual inter-penetration and sway between frontier communities of the neighbouring states. The frontier, therefore, is an integrating factor. In contrast, although physical, geographical, cultural and political factors may, at times, tend to make it inconspicuous, the boundary must remain essentially a barrier, impeding integration across the two peripheral borderlines.

4. Frontiers are transitional between geographical regions, rather than between states. They are, therefore, 'geographical' rather than 'political' in nature. Boundaries, in contrast, are purely 'political' in origin and function.
5. Frontiers are 'areal' and boundaries are 'linear' in character. The former may be described as 'natural' in so far as they are parts of the earth's surface. In some cases, frontiers fall in the category of 'geographical' regions, in as much as they possess the quality of individuality used on their function as transition zones. Boundaries are artificial, since they are selected, defined and demarcated by man.
6. Frontiers are a phenomenon of the past, whereas boundaries belong to the present. This is because unlike the case of the frontier, the linear boundary is inseparable to the functioning of the modern state.
7. Finally, a frontier, whether physical, linguistic, religious, or ethnic, cannot be moved. It may change its character, and lose much of its frontier function, but it must remain *in situ*. In contrast, boundaries are by no means immovable. Until the Second World War almost every shift in the balance of power, between neighbouring pairs of states, used to be reflected in a shift in the location of the boundary line.

Classification of International Boundaries

There are two important systems of classification of international boundaries: (i) the physical, also called the *genetic classification*. It is based on the nature of relationship between the boundary line evolution of the cultural landscape of the state whose sovereignty it defines, delimits and separates; and (ii) boundaries may be classified in accordance with their form, that is, their demarcation and fixation on the ground. A boundary may often be drawn to follow some conspicuous physical feature, such as mountain range, a river, or a lake. These are physical or physiographic boundaries. Boundaries may also be drawn to follow a geometric line (geometrical boundaries) or to separate certain ethnic communities (ethnic or anthropo-geographic boundaries). In most boundaries, however, more than one criterion of delimitation may be involved. Most

boundaries are, therefore, complex in nature. This classification is called the *morphological classification*.

Genetic or Functional Boundaries

The genetic classification of boundaries is based on the relationship that a boundary line had shared with the surrounding cultural landscape at the time of its demarcation.

(i) Antecedent Boundaries

Such boundaries predate the evolution of natural landscape. They are the most common type to come across in the New World. Here, international boundaries were agreed upon at the conference table even before the concerned territory was fully explored, and colonized.

(ii) Subsequent Boundaries

Subsequent boundaries are those whose definition and demarcation had followed the evolution of the cultural landscape. Such boundaries often conform to ethnic-cultural division of the landscape, specially, the divisions of language and religion. Most boundaries in eastern Europe, and those between India and Pakistan, and India and Bangladesh belong to this type.

(iii) Superimposed Boundaries

These are subsequent boundaries of a special type. Superimposed boundaries were also drawn after the cultural landscape had fully evolved. The difference lies in that the former type conforms to the cultural division between neighbouring communities, and were decided upon through mutual agreement. The latter, in contrast, do not conform to the socio-cultural divisions. They were imposed upon the concerned communities, either by outside powers or the overbearing unit between the two. Most colonial boundaries in Africa are of this type. In many cases, single communities were divided into two or more states. The boundaries of Ghana, Nigeria, Togoland, Dahomey and Somalian Republic are some of the examples of superimposed boundaries.

(iv) Relic or Relict Boundaries

These represent boundaries, which have lost political function, but which may still be discernible in the cultural landscape. Such boundary lines result when a smaller state is absorbed by a larger one, or when former boundaries between states are abandoned and redrawn. The boundaries between Poland and Germany, between Russia and Germany, between East and West Germany, and the former boundary between Spanish America and Anglo-America (USA and Canada).

*Morphological Classification**(i) Physiographic Boundaries*

Physiographic boundaries are those that were drawn to follow some conspicuous feature of the physical landscape. Since these boundaries follow some natural features of physical landscape, they are sometimes wrongly referred to as natural boundaries, as contrasted to boundaries drawn to follow certain geometrical lines or divisions of language or religion. The latter are sometimes referred to as artificial boundaries. This distinction is not correct. All boundaries are man-made, hence, are artificial. Some of the examples of physiographic boundaries are mountain boundaries, river boundaries, boundaries in lakes and straits, and forests, swamps and deserts.

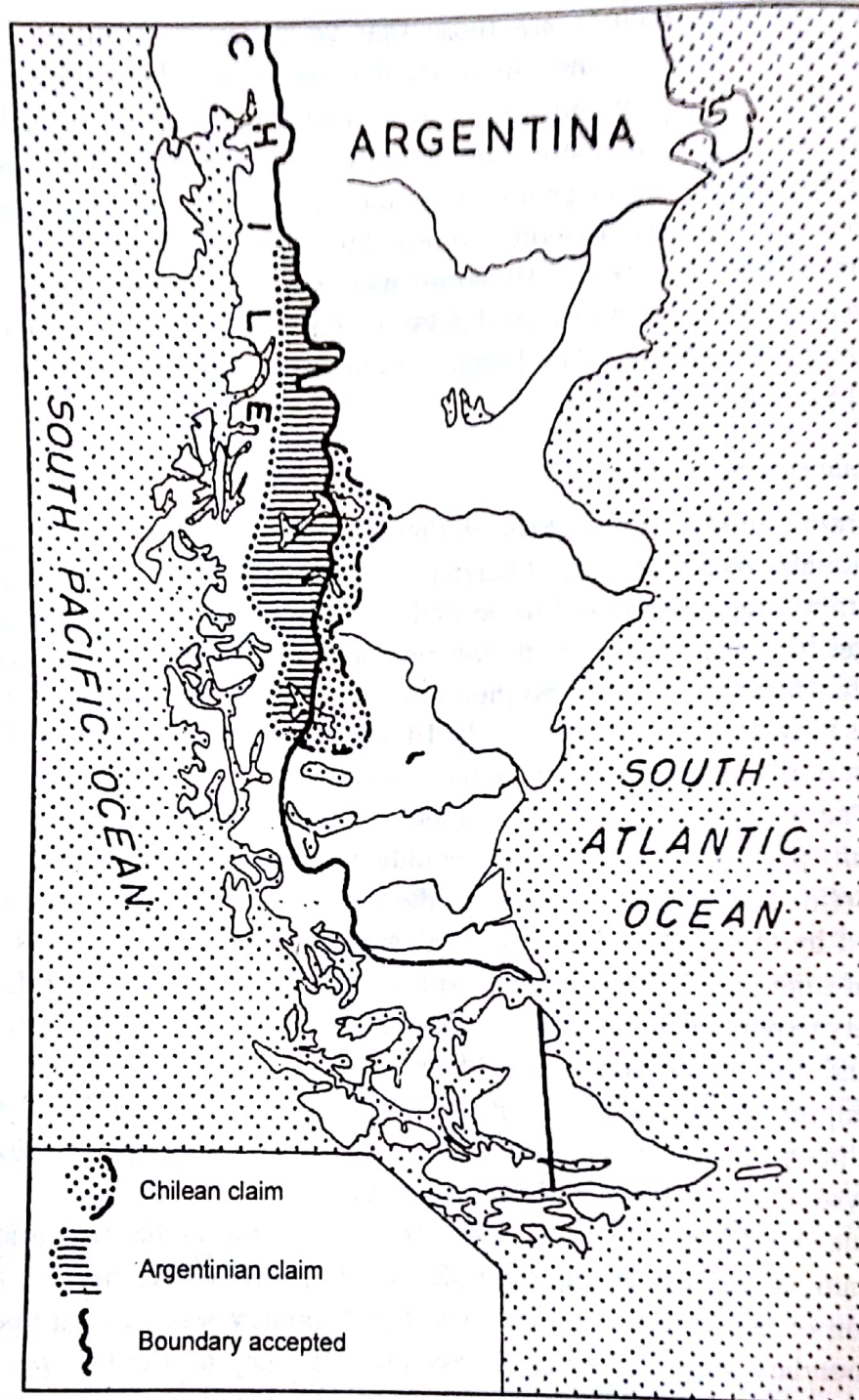
(ii) Mountain Boundaries

Mountain boundaries have been the most favoured type since they have traditionally served as natural barriers. Being firmly fixed on the ground, mountains were considered to be highly stable. However, revolutionary changes in transport and communication, and the opening of the sky as a highway, have greatly reduced their function as protective barriers. As the Chinese invasion on India across the Himalayas in 1962 proved, even the loftiest of the mountains are no longer impregnable.

The location of boundary line along a mountain range often poses difficult problems since, most mountain ranges do not possess a well-defined crest line. Even where the crest lines exist, they are often divided by transverse valleys. Besides, most mountain ranges consist of several semi-parallel ranges, each with its separate crest line. Therefore, contrary to popular belief, mountain boundary, coincide between the crest line and the water divide is seldom found. Both the Indus and the Brahmaputra originate from near the Manasarovar lakes, and thus drain both Himalayas and trans-Himalayan ranges to the sea by the combined river system of the Ganga and the Brahmaputra.

The boundary between Chile and Argentina along the Andes mountain is an interesting example which posed difficulties by the selection of mountains as boundaries. The boundary was decided upon. The boundary was, however, always obscure and, as Holdich put it, "enveloped in a cloud of conjecture". As such, the boundary treaty of 1881 'failed' in as much as it admitted of diverse interpretations when the terms of it were applied to the existing physical features of the 'Patagonian Andes' (Fig. 3.40). In the treaty, it had been agreed that the boundary should follow "the highest crest which may divide the waters". But, the fact that the highest crest and the water parting do not coincide for a

Figure 3.40 *Boundary of Argentina and Chile in Andes. Complications in the choice of international boundary along a mountain range: example of the Chilean-Argentinian boundary along the Andes.*



(After R.D. Dikshit)

distance of many hundreds of kilometres was unknown at the time of agreement. How diverse interpretation were permitted by 1881 treaty is evident from a map of the boundary. The dispute along Indo-China border in the Himalayas is another example of complications inherent in the

choice of mountains as international boundaries. The *MacMahon Line*, as the boundary between Tibet and India in the eastern sector is called, was delimited in 1914 by the treaty signed by Great Britain (for India), Tibet and China, though it was never actually demarcated on the ground.

(iii) Rivers as International Boundaries

Many of the international boundaries are based on river streams. The advantages of selecting a river as boundary are as under:

- (i) It is a clearly marked feature on the map.
- (ii) It is a more narrowly defined (almost linear) feature than mountains and hills.
- (iii) Wide, unfoldable streams offered a barrier to communications, and, as such, were thought to possess some military value by providing a line of defense against an advancing army.

Despite these advantages, the river boundaries have some disadvantages too. First, drainage basins generally tend to exert a unifying rather than a separating influence. The India-Pakistan boundary through the Indus basin, and the Indo-Bangladesh boundary are two important cases in point.

Generally, the mid-stream is defined as the international boundary. After each flood the mid-stream may change its course transferring the territory of one country to another. The problem of administration, and crime control are also serious in case of river boundaries. The Rio-Grande is an interesting example of river boundary between USA and Mexico (Fig. 3.41). In the flood plain section, this river adopts a frequently zigzag course. Following each change in the main channel, some areas along the river, forming part of one country, become included in the territory of other.

Figure 3.41 Rio-Grande: Boundary between USA and Mexico

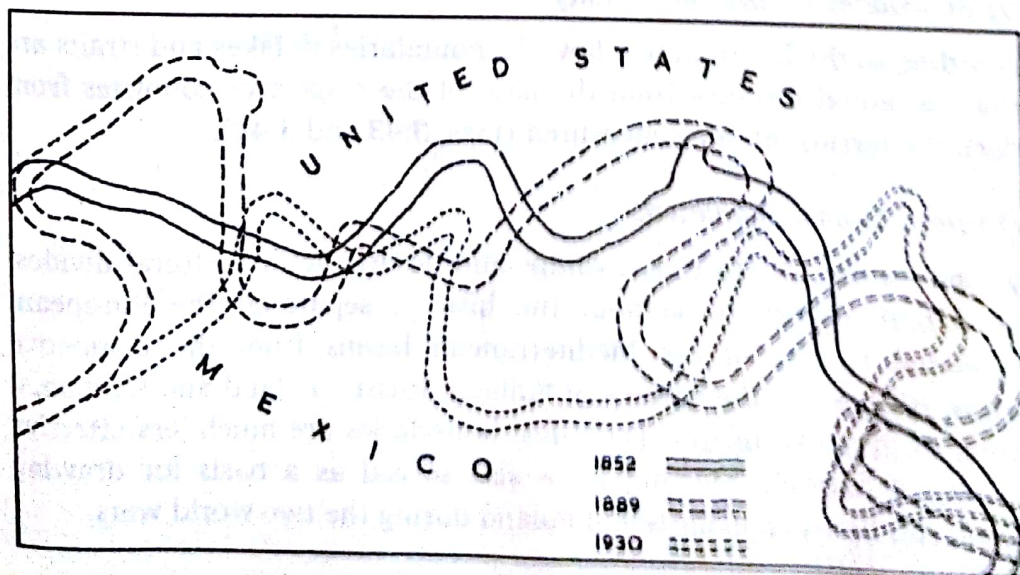
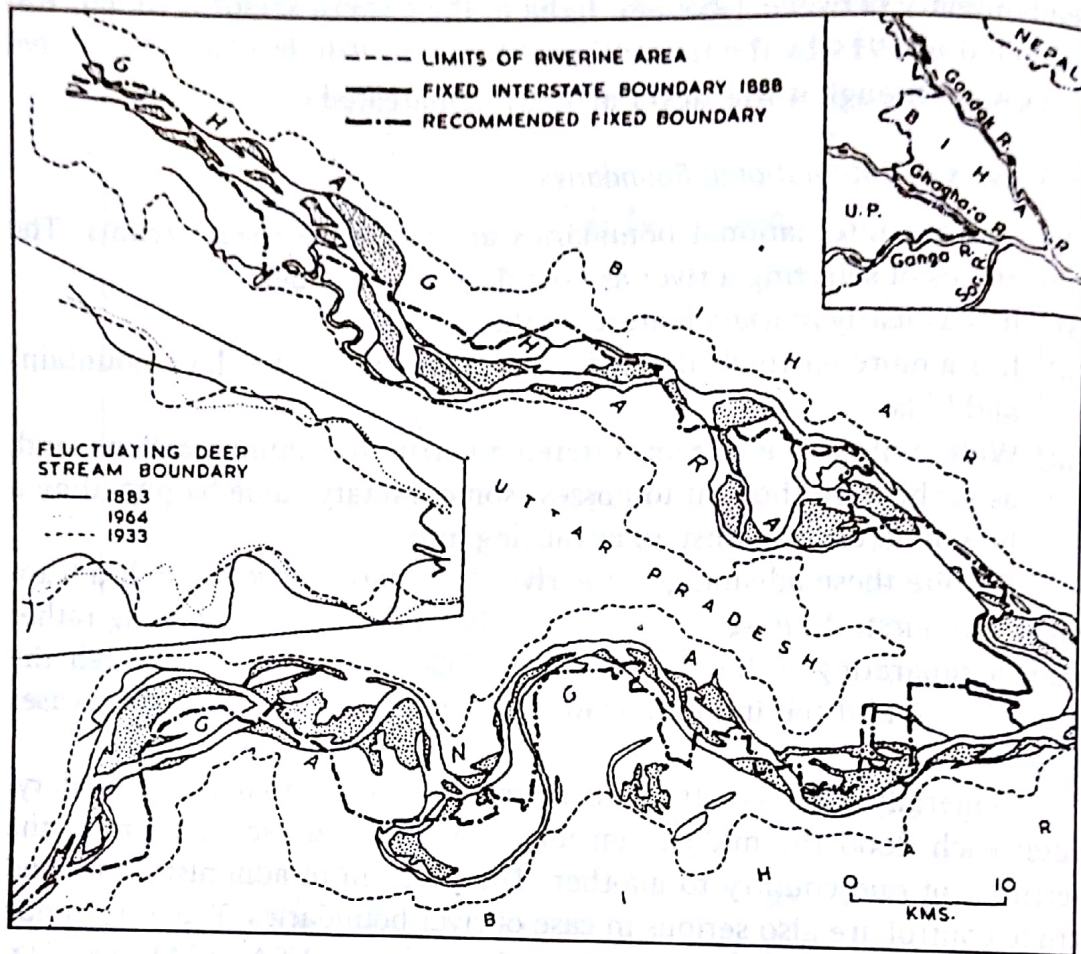


Figure 3.42 Rivers as Boundary between Uttar Pradesh and Bihar



(After R.D. Dikshit)

On the border of Bihar and Uttar Pradesh flow the Ghagra and the Ganga. In this section, these rivers frequently change their course which become a cause of dispute between the two states (Fig. 3.42).

(iv) Boundaries in Lakes and Straits

According to the international law, the boundaries in lakes and straits are drawn at equal distance from the base of the respective countries from which the territorial sea is measured (Figs. 3.43 and 3.44).

(v) Forest, Swamp and Deserts

By their nature, the forests, swamps and deserts act as cultural divides. The Sahara desert, throughout the history, separated the European-dominated culture of the Mediterranean basins from the distinctive African culture. On the borders of Finland, Russia, Poland and Lithuania, forests form the boundary. The forest boundaries are much less effective as cultural barriers. Marshes have also served as a basis for drawing boundaries between Belarus and Poland during the two world wars.