

Mapping in Support of Frontier Arbitration: Delimitation and Demarcation

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Introduction

Boundary workers are generally familiar with the use of the terms delimitation and demarcation. The separation of the making of a boundary in delimitation, the definition of the boundary in a Treaty, Judgement or other Agreement; and demarcation, the physical marking of the boundary on the ground, serves to explain the process well. However, the use of these terms was not always so clear and even today there can be confusion between the two stages. Since modern boundary settlements are often dependent on the interpretation of delimitations and demarcations that took place many years ago, it is as well to understand how these terms developed and what they meant in earlier times.

The Definition of the Terms

At the end of the nineteenth century the two terms were used indiscriminately to describe the stages in boundary making, together with other words such as fixation, delineation and definition. The first attempt to separate the two stages was made by Captain A. H. (later Sir Henry) McMahon at a meeting of the Royal Artillery Institution in 1896. During the discussion of a singularly dull paper by Lt. Col. Trotter on the demarcation of the Sierra Leone boundary (Trotter, 1897), McMahon said:

"I think when one is talking of a science it is not out of place to consider the name of that science. In my opinion, delimitation (which, as we know, is a new word, not to be found in any dictionary, at least not in Webster or Johnson or any classical dictionary) means the laying down – not the laying down on the ground, but the definition on paper, either in words or on a map – of the limits of a country. Delimitation covers...all the preliminary processes and procedure involved before a boundary is laid down on the ground... Having done all that, you then come to work on the ground, and then the process ceases to be delimitation and becomes demarcation."

McMahon's suggestion only gradually caught on. The 1902 Award in the Argentine-Chile Case (Edward VII 1902) refers to 'definition' and 'delineation' of the border followed by 'fixing the boundary on the spot', though the accompanying report by Col. Sir Thomas Holdich (Holdich, 1902) refers to 'the actual demarcation'. By the time Lord Curzon came to give the Romanes Lectures (Curzon, 1907) the idea seems to have taken hold as he adds a footnote to the word 'demarcation'.

"I use the word intentionally as applying to the final stage and the marking out of the boundary on the spot. Diplomatic agents and documents habitually confound the meaning of the two words 'delimitation' and 'demarcation', using them as if they were interchangeable terms. This is not the case. Delimitation signifies all the earlier processes for determining a boundary, down to and including its embodiment in a Treaty or Convention. But when the local Commissioners get to work, it is not delimitation but demarcation on which they are engaged."

Curzon was clear that delimitation required the arts of diplomacy while demarcation was a much more mechanical process, even if it had its more enjoyable moments:

"When the Commissioners have discharged their duty, not as a rule without heated moments, but amid a flow of copious hospitality and much champagne, beacons or pillars or posts are set up along the Frontier, duly numbered and recorded on a map."

The definitions did not always hold so that we find Major P. K. Boulnois including demarcation in delimitation as late as 1929 (Boulnois, 1929). However, by 1940, A. R. Hinks (Hinks, 1940) can assert that *"On the British distinction between delimitation and demarcation, so much obscured by the French, the author is firm."* I have failed to discover what obfuscation the French got up to but it is good to see that it failed to shake the Anglo-Saxon approach.

Current Usage of the Terms

In general the definition enunciated by Curzon is accepted though the inadequacy of just two terms to describe the process has been commented upon. Stephen B. Jones (Jones, 1945) suggests referring to the stages as:

“(1) political decisions on the allocation of territory.

(2) delimitation of the boundary in a treaty.

(3) demarcation of the boundary on the ground.

(4) administration of the boundary.”

Similarly, Victor Prescott (Prescott, 1979) refers to “allocation, delimitation and demarcation” stages.

T. S. Murty would sub-divide further (Murty, 1980):

“The confusion about the connotation of ‘frontier’ is nothing as compared with that of ‘delimitation’...of boundaries. The processes referred to by that term often include all the various and separate stages of the formalisation of a boundary: delimitation proper (or allocation); definition (or description); delineation (or mapping); and demarcation (or abornement).”

Are they Distinct and Separate?

Colonel H. St. J. L. Winterbotham says “it is difficult and not helpful to separate delimitation too sharply from demarcation” (Winterbotham, 1928). Most authors with practical experience imply that the two stages react on one another without being as specific as this. On the other hand there are writers who are as positive as Curzon about separation. Sir Henry McMahon, as might be expected from the claimed inventor of the definitions, is quite sure they are distinct (McMahon, 1935). S. Whittimore Boggs is not quite so positive about the efficacy of the definitions but he does see “two distinct stages” (Boggs, 1940).

In general writers stress the interconnection between and interdependence of the various stages in boundary making, whatever they are called. Jones, with his ability to state a well expressed view that takes in to good account both the practical and theoretical aspects, says, following on from his four stages quoted above (Jones, 1945):

“Chronologically, these stages may overlap, may succeed each other promptly, or may be separated by gaps of many years. Allocation and delimitation may take place at a single conference. On the other hand, a general allocation of territory may be agreed upon long before boundaries are delimited. There are boundaries formally delimited years ago that have not yet been demarcated. Some boundaries have remained unadministered for many years, while others have been under de facto administration before they were delimited, or even before the final allocation of territory was decided.

In principle, there is a strong continuity in boundary-making, regardless of gaps or overlaps in the chronological history. In territorial allocation, nowadays, it is seldom possible to ignore the question of boundary site. A treaty of delimitation involves the choice of site and the choice of words with which to define the site. Also it may include provisions for demarcation and administration. Demarcation is not solely an engineering task, for almost inevitably there are fine decisions on site to be made. The treaty cannot define the line as exactly as surveyors can run it. In their fine decisions, the demarcators should consider ease of administration... In no way is this continuity of boundary-making more evident than in the case of errors. If territorial allocation has been unwise, the utmost nicety of treaty phrasing or surveying will not make a stable boundary. The wisest allocation may lead to friction if the treaty definition of the boundary does not correspond to geographical realities. Words that seem simple and straightforward may prove stumbling-blocks when surveyors endeavour to demarcate the line. Border administrators may struggle with problems which were inherent in some conference-table decision or sprang from words used without knowledge of the terrain. The statesman in conference, the surveyor at his instrument, and the border officer at a busy bridge or lonely road are fellow workers.”

I would certainly say amen to this approach and plead strongly for Judges of the International Court and other Boundary Arbitration Tribunals to be added to the workers listed in the last sentence.

The Practical Side of Delimitation

On balance it would seem that practice this century has accepted that delimitation and demarcation are two stages in the making of a boundary but that opinions vary on the efficacy of treating them as two distinct operations or two parts of a single operation. It would seem appropriate to follow the implications of Jones and treat each case on its merits. What is important is that whoever is responsible for the delimitation considers the likely problems in demarcation and takes advice on both the location of the boundary and how it is defined. Ron Adler says (Adler, 1995): *“The wording of a treaty or agreement should include anticipation of the demarcation stage and therefore boundary engineers should be represented amongst the treaty negotiators.”* A. C. McEwen says much the same (McEwen, 1971): *“When the delimitation of a boundary is contemplated it is highly desirable that the negotiators should make use of the advice of those who have had practical experience in the laying down of boundaries on the ground.”* These strictures should apply not just to negotiators of Treaties but also to the Judges of Arbitral Courts, including the International Court, but it is clear that boundary engineers, i.e. people with practical demarcation experience, rarely have an influence on the formulation of the judgements of such Courts and this can lead to demarcation problems.

Jones once again produces an interesting exposition of the position (Jones, 1945):

“The best definition or description of a boundary is that based on personal knowledge of the area in question and then prepared with the help of a detailed topographical map. Maps are, however, only a symbolic representation of what obtains on the ground; and the purpose of a boundary is that it should regulate what obtains on the ground. Correctly speaking, the boundary should be ascertained on the ground and delineation done then only. Definition should not be merely a verbalised delineation. A boundary should not be defined on the basis of descriptions compiled from maps, notwithstanding the difficulty which this imposes on central governments and foreign offices, few of whom would like to go and visit the often inaccessible areas where boundaries are located.”

Once again Judges of Arbitral Tribunals should be added to the reluctant travellers in the last sentence.

What Latitude should Demarcators have?

At the end the last century, delimitation was mainly undertaken on inadequate mapping whereas now it is usual, but not inevitable, that accurate topographic maps are available on which to mark the boundary. All early authors with practical experience call for demarcators to be given some latitude to adjust the delimited boundary in order to take account of differences between reality and a delimitation based on inadequate information. There is an implied assumption that any such adjustments, if they do not exceed the demarcator's powers, should become part of the boundary. Thus Curzon says (Curzon, 1907):

“Lastly, when the Commissioners reach the locality of demarcation, a reasonable latitude is commonly conceded to them in carrying out their responsible task. Provision is made for necessary departures from the Treaty line, usually ‘on the basis of mutual concession.’”

The principle of mutual concession is obviously reasonable though its application in practice has been carried to ridiculous lengths in some cases, with the exchange of desert areas to the nearest square metre.

As the leading practitioner of boundary determination in his generation, Sir Thomas Holdich's writings should be invaluable. Unfortunately they are almost invariably anecdotal but the following extract indicates his approach to latitude for demarcators. (Holdich, 1916):

“There is yet another shoal in the intricate sea of delimitation (even when the delimitation is based on sound topography) and that is the selection of some impossible geographical feature to carry the boundary. This is indeed not very usual, but it is very fatal to rapid and satisfactory progress in demarcation. An instance of this occurred in demarcating that part of the Indian boundary which separates Chitral (and Kashmir interests) from Afghanistan. Here the agreement defined the boundary as running parallel to the Chitral river at an even distance of 4 miles from the river bank. Thus it fell on the spurs of a flanking range, about halfway between the summit and the foot, festooning itself from spur to spur, cutting across mountain torrents and dividing water rights in accessible valleys, a continuous line of ascent and descent over some of the wildest, ruggedest and most inaccessible mountainside country that the Indian frontier

presents, albeit it overlooks one of the loveliest of frontier valleys. Demarcation was an utter impossibility, nor could, or would, any tribesman of that wild Pathan frontier pretend to recognise such a line without an infinity of artificial boundary marks. Fortunately, it was possible to suggest an alternative without any great loss of time, and as that alternative was the well marked crest, or divide of the range, instead of being halfway down its ragged side, and as the alternative would include a certain concession of (utterly unimportant) territory to the Afghans there was no great difficulty in effecting an alteration in the text of the agreement. Here again the hazard of the business was delay."

Even with good topographic maps it is quite possible for diplomats or lawyers to make a similar mistake today if they do not either visit the ground or take advice from those who have. Although latitude was vital when maps were bad, it is worth noting that it is still considered necessary for modern demarcation. The Tribunal in the Argentina-Chile (Palena) Case made specific provision for latitude as follows (Elizabeth II, 1966):

"The Mission shall erect a boundary post at each point identified in paragraph 1 of this Award, or, if necessary in order to take account of geographical realities, as close as possible to each such point within a distance of not more than 300 metres therefrom. If any such displacement occurs, the course of the boundary shall, if required, be revised by the Officer in charge of the Mission to the extent necessary for it to pass through the actual location of the boundary posts."

This provision was not invoked but it is quite clear that if it had been the boundary would have been altered by the Demarcation Mission.

Conclusions

Whether delimitation and demarcation are concurrent, consecutive or separated by many years, the two stages inevitably react on one another and they should not be treated in isolation. The demarcator, since he is, perforce, dependent on the delimitation, will always be aware of this connection. It is equally important that diplomats and lawyers responsible for delimitations should realise how important it is for these two stages to be

conducted in such a way as to provide mutual assistance.

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