

The Objectives Of Land Boundary Management

Gerald H. Blake

Introduction

This paper was presented by way of an introduction to the International Boundaries Research Unit's 7th training workshop which was devoted to *Land Boundary Demarcation and Management* and was held in Durham on 13-14 July 1998.

Land boundary diversity

The world's 315 or so land boundaries display a huge variety of characteristics, and approaches to boundary management are similarly diverse. It is impossible to prescribe in detail how boundaries must be managed, but it is possible to identify some emerging principles of good management. Surprisingly little systematic thought has been given to boundary management in the past. Some management-related aspects such as boundary *delimitation* and *demarcation* have been well documented, and are becoming more a science than an art. Boundary demarcation is not the end of the process however, but the beginning, and the subsequent quality of boundary management can fundamentally affect relations between states and the welfare of the borderland peoples on either side. Bearing in mind that many of the world's boundaries were superimposed by imperial powers, it is not surprising that many boundaries are inherently difficult to manage.

Boundary characteristics

The management requirements of particular boundaries will be influenced by six groups of factors:

Boundary history

Boundary age may have a profound effect on management strategies. Well established boundaries such as some in Europe which have been in place for centuries present different challenges to recent delimitations. Similarly, boundaries superimposed in the age of imperialism with scant regard for physical or human geographies will present a range of problems less likely to be encountered where a boundary has emerged over time, or was delimited before the intensity of human activity was well developed, as in the Canada-United States example. Some boundary histories have left behind disgruntled communities who were displaced, or ended up on the wrong side of the line.

Good boundary management requires an awareness of boundary history, which may explain some acute sensitivities.

Legal status

The management requirements of formally agreed and demarcated boundaries are likely to be different from those which have never been subject to treaty, or properly documented and surveyed. Such boundaries are not necessarily disputed, but may present management headaches. The functions of boundaries within the major politico-economic trade blocks (EC, NAFTA, ASEAN etc) clearly differ from those outside. Some boundaries are demilitarised, others are bordered by neutral territory, and a number are boundaries with dependent territories or military bases (such as the UK Sovereign Territories in Cyprus).

Type of boundary line

One of the chief objectives of boundary management is to maintain a clearly demarcated and unambiguous boundary line. Broadly speaking land boundaries may follow physical features ('physiographic' boundaries) such as rivers, watersheds, or lakes, man-made features ('anthropomorphic' boundaries) such as a railway or caravan route in the desert, or comprise straight lines ('geometric' boundaries) which may be based on lines of latitude or longitude. Each type of boundary presents different management tasks. Physical features such as rivers can move: Figure 1 illustrates changes in the Zaire river between 1960 and 1977, causing major alterations to the navigable channel, which marks the international boundary. Man-made features such as date palms plantations or tracks can cause uncertainty, and some geometric boundaries before the days of GPS may have been mis-aligned. Regardless of boundary type, the extent and quality of demarcation can vary enormously, from cairns and posts to sophisticated monuments.

Physical geography

Land boundaries may cross a great variety of physical environments such as mountains, deserts, or rain-forests, and boundary management tasks and opportunities vary accordingly. Demarcation methods will necessarily differ, and opportunities

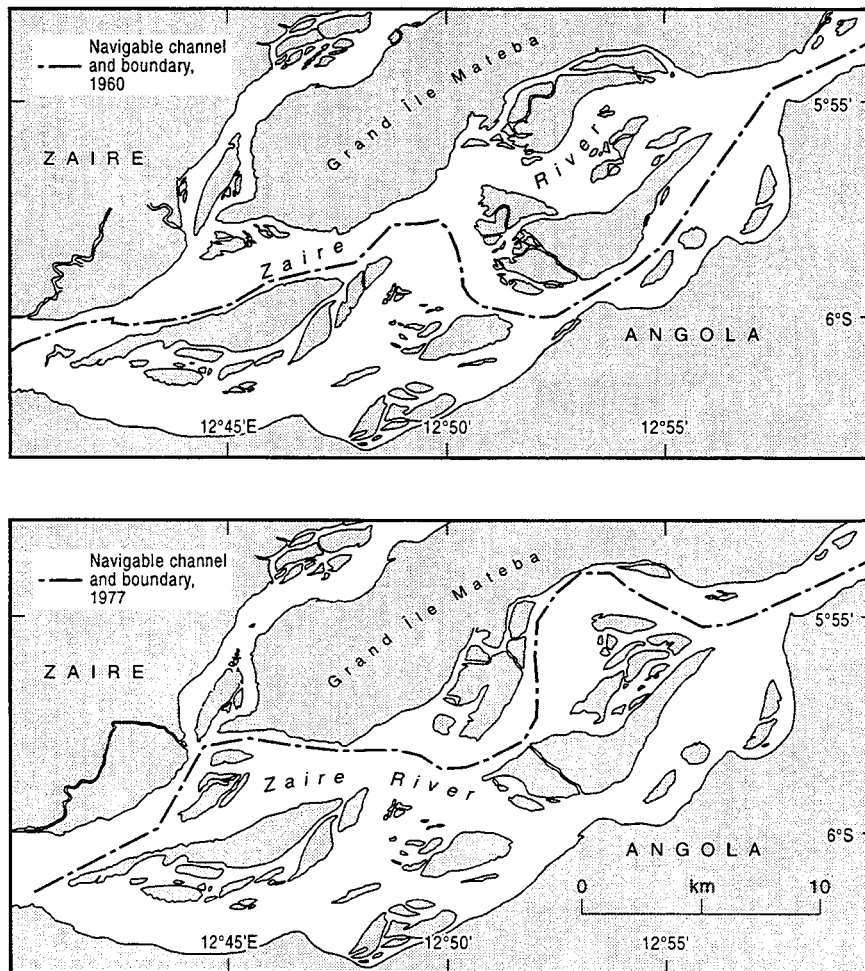


Figure 1: The Zaire-Angola boundary in the Zaire River 1960 (top) and 1977 (bottom)

for access and security will be radically different. Some African treaties specify how often and by what method vegetation is to be cleared from boundary markers.

Human geography

Any boundary management plan which is intended to be anything more than symbolic, must be based upon a good knowledge of human geography on both sides of the boundary. Contrasting approaches to management will be evident in regions of high and low population density. A border which divides people of common culture and language with a strong impulse to pursue socio-economic interaction will be managed very differently from a boundary conforming with an ethnic/linguistic divide. Much will depend on national policies concerning the degree of openness it is intended to achieve.

Access

In some parts of the world gaining access to an international boundary with a view to crossing legally can be almost as difficult as the crossing itself. Access depends on provision of roads or railways, which may be plentiful, scarce, or non-existent. In some states access to border regions is

restricted, and road blocks and checks may be experienced far from the boundary. The management objective should be to allow citizens reasonable freedom to reach and cross the boundary, while achieving the required levels of security. Practice varies greatly between states, but management possibilities may be restricted by lack of good access routes, or security policies on one side or the other.

Management objectives

The objectives of any boundary management strategy will be determined initially by national foreign policy objectives. The boundary may even be used as an instrument of foreign policy, particularly if relations between neighbours are poor. The fundamental aims of good boundary management are designed to achieve:

- International peace
- Local and national security
- Borderland prosperity
- Effective local government

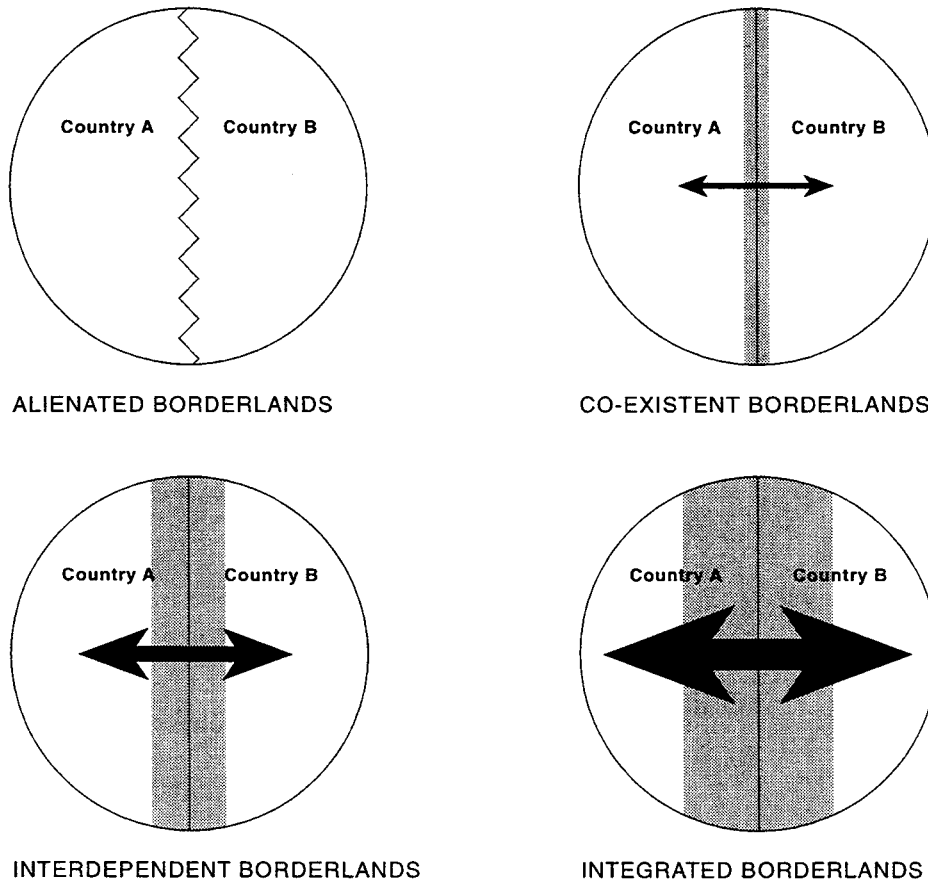


Figure 2: (after O.J. Martinez, 1994)

To achieve these implies a high degree of goodwill between the states, and arrangements for practical cooperation. Although it may not be an immediate objective of borderland management in most cases, an ideal is to achieve more than peaceful co-existence by moving towards borderland integration, as illustrated by Oscar Martinez in his four-fold model of alienated, coexistent, interdependent, and integrated borderlands (Figure 2). Far from being regions of deprivation at the margins of the state, borderlands in some favoured areas have the potential to become regions of opportunity.

Management of the boundary line

Treaty texts and other documentation

Good boundary management begins with a clear legal framework which describes the alignment clearly for all time and provides for problems which may arise in future, such as what happens with the discovery of resources in the border region, or provision for changing physical features such as rivers and streams which may change course.

Physical management

Where boundaries are demarcated, the infrastructure has to be regularly maintained, for example cairns, pillars and fences. Figure 3 is a somewhat extreme case; in the Joint Zone between North and South Korea, the international boundary crosses tables used for armistice talks in 1953. The whole setting is impeccably maintained. Physical features which mark the boundary, such as rivers, have to be monitored for physical change. Where delimited boundaries have not been demarcated, it is generally advisable that they should be, especially in populated regions.

Access management

This is closely connected with security management. Paradoxically the most 'open' borders are often those which have to be managed most carefully for security. Ideally, border crossings are reached with minimum inconvenience imposed by checks, military restrictions, etc. and the crossing is achieved quickly and in reasonable comfort. In most states a large number of agencies are involved – customs, passport control, transport services, police etc. The degree of 'openness' and hence the level of activity is a direct product of government policy. In extreme cases, access

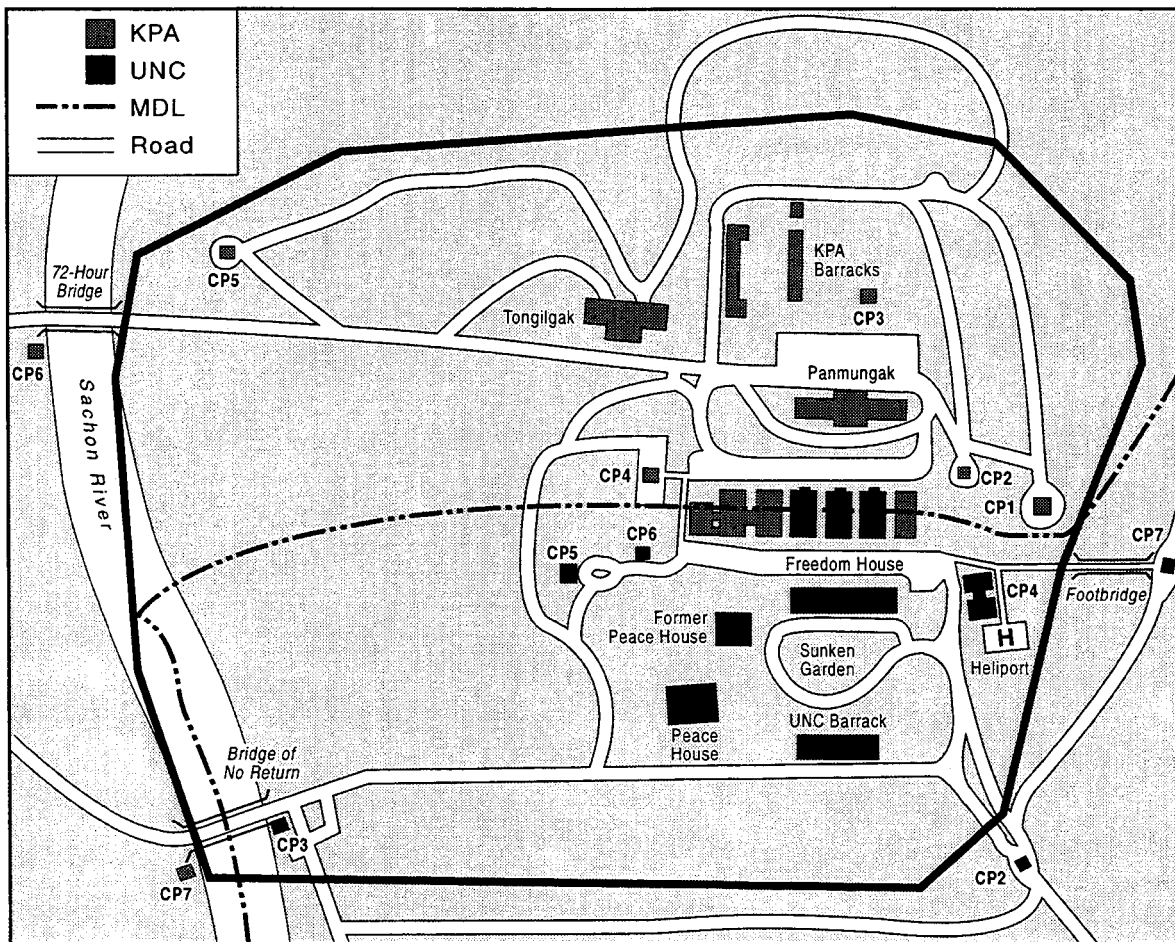


Figure 3: The North Korea - South Korea joint security area at Panmunjom

management may mean keeping the border closed to traffic. Practical aspects of access management include the provision of properly maintained transboundary routes, and well-run crossing points with adequate amenities for travellers.

Security management

Security activities at the border will depend upon foreign relations, geography, and economic opportunity. Citizens of most states still perceive the boundary as providing security from:

- Unwanted people; illegal migrants, smugglers, saboteurs, terrorists, refugees, criminals etc.
- Unwanted goods; drugs, weapons, smuggled products, pornography, contaminated food etc.
- Health hazards; infected travellers, pollution, foot and mouth disease etc.
- Armed attack. While modern defence systems are deployed in depth, the boundary may still act as a trip-wire to invading forces.

Transboundary resource management

As populations increase and resources become scarcer, transboundary resources are in greater

demand. These include, for example, oil and gas reservoirs near or straddling boundaries; minerals; groundwater; divided river basins; borderland protected areas; straddling fishstocks in shared lakes and estuaries; forestry and grazing. Historic and cultural sites in borderlands are also a type of resource of significance in some regions.

Transboundary resource management has made considerable progress. To work properly it assumes that there is:

- shared knowledge about the resource;
- a formal agreement about resource exploitation; and,
- a standing committee or commission to manage the agreement.

Collaboration over transboundary resources has considerable potential for confidence-building between states. This is perhaps especially true of transboundary protected areas, which are growing in number worldwide at an encouraging rate.

Environmental management

Good environmental management cannot be achieved in the modern world without transboundary cooperation. Among other activities collaboration is essential for:

- the protection of threatened species;
- environmental research;
- fire and pollution control;
- suppression of wildlife poaching; and,
- encouragement of ecotourism.

Crisis management

This occurs at various levels, most obviously at national and local scales.

National: Incidents along the border are not allowed to escalate into politically damaging events. A mechanism such as a joint boundary commission can address these issues without delay.

Local: Day to day problems arising along the border e.g. stray animals, or a polluted river, are dealt with promptly and are not allowed to escalate. Many borderland officials meet routinely to exchange information and plan cooperation on a range of local matters.

Conclusion

Most of the world's land boundaries already experience some of these management strategies, but relatively few could claim to practice all of them. Some are already very successful. Relatively few as yet have integrated management strategies in place. Several are involved with regional development schemes, especially in Europe. Better boundary management can be the route to the enhancement of goodwill between neighbouring states, and deserves to be given more serious consideration than it has hitherto received. The International Boundaries Research Unit at Durham offers training opportunities as a contribution to this important endeavour.

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Professor Gerald Blake is Director of the International Boundaries Research Unit at the University of Durham.