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Prolegomena

1.1 A NEW APPROACH TO INTERNATIONAL BOUNDARY-MAKING

The field of boundary-making is multi-disciplinary. Boundaries have been first studied by geographers, engineers, and commissioners concerned with the science of delimitation. At the same time, boundaries have a significant place in the legal discourse. The works of jurists contribute to the understanding of

1 Although the terms 'boundary' and 'frontier' are often considered as synonyms and used interchangeably in the literature, they are distinct. As explained by boundary experts, 'frontiers are zones of varying widths' and were used in 'the political landscape centuries ago'. By contrast, the term 'boundary' is rather modern and denotes the specific lines established to divide the jurisdictions of states on land and at sea. V. Prescott, Political Frontiers and Boundaries (Allen & Unwin 1987); D. Johnston, Theory and History of Ocean Boundary-Making (McGill-Queen’s University Press 1988); S. Boggs, International Boundaries: A Study of Boundary Functions and Problems (Columbia University Press 1949); S. Jones, Boundary-Making: A Handbook for Statesmen, Treaty Editors and Boundary Commissioners (Carnegie Endowment for International Peace 1947); Prescott (n 1). The publications by Durham University’s International Boundaries Research Unit (IBRU) are also of great importance.

2 See G. Curzon, Frontiers (Clarendon 1908); T. Holdich, Political Frontiers and Boundary Making (Macmillan 1916); C. Fawcett, Frontiers: A Study in Political Geography (OUP 1918); P. de La Pradelle, La Frontière: Étude de Droit International (Editions Internationales 1928); S. Boggs, International Boundaries: A Study of Boundary Functions and Problems (Columbia University Press 1949); S. Jones, Boundary-Making: A Handbook for Statesmen, Treaty Editors and Boundary Commissioners (Carnegie Endowment for International Peace 1947); Prescott (n 1). The publications by Durham University’s International Boundaries Research Unit (IBRU) are also of great importance.

legal concepts related to delimitation and promote the peaceful settlement of international boundary disputes.⁴

This book offers a new approach to international boundary-making. It revisits the purpose and methods of delimitation in two ways. Firstly, it examines boundary-making from the perspective of non-state actors. Boundaries secure the co-existence not only of states with each other but also of states with non-state actors that hold interests in the area under delimitation. The presence of non-state actors in disputed areas, especially in contested waters, is ever-increasing. Therefore, it is important to map the place of private rights in the processes of boundary-making.

Secondly, the book provides a comparative analysis of land and maritime boundary-making. Although the subject matter of the book is maritime delimitation, the efficacy of the rules which govern this process is tested using the well-established norms of land delimitation. On the basis of a critical analysis of the legal framework governing maritime delimitation, the book makes recommendations for the evolution of international law of the sea.

1.2 boundaries revisited

International boundaries are as old as sovereign states.⁵ They first emerged on land when states sought to determine the limits of their territorial dominion in relation to each other. At sea, international boundaries did not appear until the mid-twentieth century.⁶

The reasons for this delay were both legal and practical. The ocean has always been 'both a means of communication and a store of riches'.⁷ But for centuries it

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⁴ This demonstrates that, despite their differences, law and science are complementary.


⁶ Until then, maritime delimitation dealt almost exclusively with the fixing of the outer limits of states’ territorial waters (ie those directly adjacent to the shore). G Tanja, The Legal Determination of International Maritime Boundaries: The Progressive Development of Continental Shelf, EFZ and EEZ Law (Kluwer Law and Taxation 1990) xv, 1, 293.

was considered to be open to all states for navigation and fishing. States’ offshore jurisdiction did not extend beyond three nautical miles from the coast, which made recourse to maritime boundaries relatively unnecessary. In the course of time, events such as the need to extract natural resources from the ocean for reasons of energy security and economic development, the decolonization and independence of numerous coastal nations, and the codification of international law of the sea in official conventions, led states to expand their maritime control to a much greater distance and establish international boundaries in the ocean.

Given its long history and application in different settings, the process of international boundary-making has undergone dramatic changes, which can be approached in various ways. The majority of studies refer to the evolution of boundaries from natural to artificial. Natural boundaries are those already fixed by nature (such as rivers, deserts, mountain crests or the shorelines of lakes and seas), and it is these that were mainly used in the past. By contrast, most modern boundaries can be described as artificial or conventional. They are marked by humankind, by means of stones, monuments or other means that do not follow the area’s physical environment such as geometrical lines or parallels.

The above classification is suited to studies in natural or political geography. As a legal study, the present work suggests another taxonomy, 

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8 Subject to the so-called ‘freedom of the seas’, a principle originally formulated by Hugo Grotius. See Chapter 2.
10 See Proclamations of President Harry S. Truman, ‘Policy of the United States with Respect to the Natural Resources of the Subsoil and the Seabed of the Continental Shelf’, ‘Policy of the United States with Respect to Coastal Fisheries in Certain Areas of the High Seas’ (28 September 1945); Proclamation of Argentina on the Epicontinental Sea (5 December 1946); Declaration of the Maritime Zone of Chile, Ecuador, and Peru (18 August 1952) (Santiago Declaration).
13 See Boggy (n 2) 18–25; Jones (n 2) 7–8; Prescott (n 1) 63–80.
14 Though not all geographers accept the division of boundaries into natural and artificial; see the works of Paul de La Pradelle, Sieger and Hartshorne cited in Boggy (n 2) 24.
based on the legality of the ways in which boundaries are made. For many centuries, international boundaries were imposed unilaterally by forcible means and acts of political power. Today, however, the establishment of boundaries is a transactional legal process between the states concerned. This evolution of international boundary-making can be broken down into the following three phases.

**Fifteenth and sixteenth centuries.** During medieval times, the creation of boundaries was mainly based on acts of military or political supremacy. Quite often, boundaries would emerge from violent conflicts and long wars between powerful hegemonies. On other occasions, boundaries were established by imperial decrees and papal bulls on the basis of the discovery and symbolic annexation or occupation of *terra nullius*. According to scholars, ‘the medieval world did not have international boundaries as we understand them today’ as ‘authority over territorial spaces was overlapping and shifting’. Unstable boundaries of this kind were often the source of conflicts between states rather than a construct that would consolidate international relations.

**Seventeenth to nineteenth centuries.** The second phase of boundary-making was quite mixed. Some international delimitation treaties bilaterally establishing boundaries were signed but, overall, the majority of boundaries were still imposed unilaterally. In Europe, the seventeenth century was marked by wars over land acquisition and territorial exchanges between the rulers of Westphalian states. The creation of boundaries by arbitrary and forcible means continued on the continent for the next two centuries. Outside Europe, the seventeenth century saw the start of the colonial era, which lasted until the 1900s. During that period, the majority of boundaries in America, Africa and Asia were

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20 See the conflicts cited in Zacher (n 16) 217–19.
imposed by the European controlling powers in disregard of local rulers.\textsuperscript{21}

**Twentieth century to present.** In the twentieth century, the making of boundaries became a strictly bilateral process. The settlement of two world wars, the end of colonialism, the formation of the League of Nations and its successor the United Nations and the development of international rules promoting interstate cooperation and maintaining international peace are some of the main explanations for this shift in the nature of boundary-making. Boundaries became the legitimate means of co-existence between states.

Under contemporary international law, boundaries can be established only through bilateral\textsuperscript{22} and peaceful means.\textsuperscript{23} The unilateral establishment of international boundaries is *ipso facto* void.\textsuperscript{24} The vast majority of land and maritime boundaries are now established through treaties between the states concerned. This transactional process requires that ‘two countries agree on a line and stick to it, as individuals agree on property lines’.\textsuperscript{25} When no

\textsuperscript{21} Milano (n 15); M Shaw, *Title to Territory in Africa: International Legal Issues* (Clarendon 1986) 27–58.

\textsuperscript{22} *Case Concerning the Territorial Dispute (Libyan Arab Jamahiriya v Chad)* [1994] ICJ Rep 6, para 32: ‘The fixing of a frontier depends on the will of the sovereign States directly concerned.’ As added in *Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v United States)* [1984] ICJ Rep 292, para 89, ‘any delimitation must be effected by agreement between the States concerned, either by the conclusion of a direct agreement or, if need be, by some alternative method, which must, however, be based on consent’.

\textsuperscript{23} UN Charter (signed 26 June 1945, entered into force 24 October 1945) 1 UNTS XVI, arts 2(3) and 33(1). The same is repeated in the law of the sea for maritime boundaries. See UNCLOS, preamble, arts 279–80. Although unlawful, aggression in connection with territorial claims has not entirely vanished, however (eg Turkish invasion of Cyprus in 1974; war between Israel and Arab States in 1948–49, 1956 and 1967; armed conflicts between Pakistan and Kashmir in 1965). See J Vasquez and M Henehan, ‘Territorial Disputes and the Probability of War 1816–1992’ (2001) 38 Journal of Peace Research 123; T Rider and A Ossias, ‘Border Settlement, Committee Problems, and the Causes of Contiguous Rivalry’ (2015) 52 Journal of Peace Research 505; T Wright and P Diehl, ‘Unpacking Territorial Disputes: Domestic Political Influences and War’ (2016) 60 Journal of Conflict Resolution 645–669. No wars have yet taken place with regard to maritime boundaries (with the exception, perhaps, of the so-called Cod Wars, which were more akin to militarized conflicts than to actual wars). The dangerous tensions arising in the ocean that may threaten international stability are those concerning territorial sovereignty over islands (eg Sino-Japanese dispute over the Senkaku/Diaoyu islands in East China Sea; Sino-Vietnamese dispute over the Spratly islands in South China Sea).

\textsuperscript{24} Fisheries Case (United Kingdom v Norway) [1951] ICJ Rep 116, 132: ‘Although it is true that the act of delimitation is necessarily a unilateral act, because only the coastal State is competent to undertake it, the validity of the delimitation with regard to other States depends upon international law.’ The same goes for land boundaries.

agreement can be reached, states may resort to third bodies, such as international courts or tribunals. Under no circumstances, though, can states resort to force, as that would breach their international duty to settle their disputes peacefully.

1.3 BOUNDARIES AND STATES

International law does not require that a state’s boundaries be ‘fully delimited and defined’ for purposes of statehood. A sovereign state exists even if its external boundaries are outstanding, unstable or actively challenged by another state. Notwithstanding, international boundaries serve a number of practical and symbolic functions in the lives of states. On land, boundaries permit the exercise of states’ territorial sovereignty and secure nations’ self-sufficiency and territorial integrity. At sea, boundaries are mainly associated with the economic welfare of states and the peaceful utilization of the oceans among nations.

More importantly, ‘Good fences make good neighbours’. By definition, a boundary is ‘[a] line which marks the limits of an area’. Both on land and at sea, international boundaries mark the limits of national jurisdiction between states. Within those limits, states exercise their authoritative powers (law-making, enforcement) over the things, persons and events situated in their domain.

This makes delimitation particularly important for land and maritime areas claimed by two (or more) neighbouring states, as happens when states challenge

26 Adjudication and arbitration are the most popular third-party means of delimitation. States can also resort to mediation and conciliation, although these are rarely used. In a few cases, delimitation was effected by a boundary commission. For example, in Decision Regarding Delimitation of the Border between Eritrea and Ethiopia (2002) 25 RIAA 85, the commission comprised five arbitrators who performed delimitation on the basis of international law and the procedural rules of arbitration, although this amounted in essence to delimitation by an international tribunal.

27 Questions of the Monastery of Saint Naoum (Albanian Frontier) (Advisory Opinion) PCIJ Rep Series B No 9 (1924) 10; North Sea Continental Shelf Cases (Federal Republic of Germany/Denmark, Federal Republic of Germany/Netherlands) [1969] ICJ Rep 3, para 46. As stressed in Deutsche Continental Shelf Gas-Gesellschaft v Polish State (1929) PCIJ AD No 5, 14–15, ‘[w]hatever may be the importance of the delimitation of boundaries, one cannot go so far as to maintain that as long as this delimitation has not been legally effected the State in question cannot be considered as having any territory whatever’.


29 Boggs (n 2) 9–12.

30 V Prescott, The Maritime Political Boundaries of the World (Methuen 1985) 1; Johnston (n 1) 42.

31 A phrase spoken in Robert Frost’s poem ‘Mending Wall’, R Frost, North of Boston (David Nutt 1944).

1.4 Boundaries and Non-State Actors

Whether on land or at sea, and whether effected through a treaty or a third party, delimitation is inextricably intertwined with the interests of the states concerned. The process of delimitation always involves weighing and balancing the states’ divergent interests with a view to reaching a result that will be workable for both sides.

But at the same time, the impact of international boundaries extends beyond the states’ interests. It is common for there to be non-state actors residing or operating in land and maritime areas claimed by two states. Quite often, these natural or juridical persons hold private rights (eg for farming, grazing, exploration, fishing) granted by one or other of the states without the consent of the other. On some occasions, those rights are granted at a time when the area is already the subject of controversy between the states, while on other occasions the interstate tension arises after the unilateral creation of private rights in a previously undelimited area. In both situations, though, the rights relate to a space claimed by two states.

As non-state actors, the holders of private rights are not parties to boundary disputes. These arise and are dealt with exclusively between States. However, the subsequent delimitation of the area in which private actors reside or operate can have a direct impact on their interests. If the area where private activities are carried on eventually remains with the state that originally controlled it, then the existing private rights will retain their status. On the other hand, if the area is redistributed to the other state, the private rights situated therein will be displaced, causing legal uncertainty for the interests of the private actors concerned.

The risk of reallocation is increasingly threatening private rights in contested waters. As much as 71 per cent of the earth’s surface is covered by the

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33 This could be a boundary arrangement made by former colonial powers that was subsequently questioned by the colonized countries after gaining independence, or the limits of an empire or federation after its dissolution. The lines established by unilateral or forcible means were administrative or internal rather than international boundaries.

34 See Chapter 2 for more on this practice.
ocean and almost half of this is under the jurisdiction of coastal states.\textsuperscript{35} However, only half of the world’s maritime boundaries have been fixed.\textsuperscript{36} During recent decades, the number of maritime boundary disputes has risen significantly, accompanied by the unilateral creation of private rights by the states involved.\textsuperscript{37} While great efforts have been made in practice and jurisprudence to find equitable solutions for the states concerned, it is by no means certain that private interests find a place in the equation.

When investigating whether international law deals with the protection of private interests in contested waters, one must turn to the rules governing maritime delimitation as established by conventions on the law of the sea, delimitation treaties between states, the rulings of international courts or tribunals and custom.

Alone, however, an analysis of the rules of the sea would give only a snapshot of the place of private rights in maritime delimitation. In order to determine whether the interests of non-state actors are \textit{effectively} protected in the ocean, one must consider how private rights are treated by international boundary-making in general – that is, both on land and at sea. A comparison between land and maritime delimitation will show whether international law treats private rights in all settings in a coordinated manner or whether there are asymmetries between land and sea.

In light of the above, the book will answer the following questions:

- First, to what extent do private rights affect a boundary’s course during land and maritime delimitation?
- Second, in what ways does international law preserve any reallocated private rights on land and at sea post delimitation?

\subsection*{1.5 HOW TO COMPARE LAND AND SEA?}
Comparison is one of the most important research methods in law.\textsuperscript{38} To compare is ‘to put together several objects or several elements of one or more objects in order to examine the degrees of similarity so as to be able to


\textsuperscript{37} See Chapter 2.

draw conclusions from them that the analysis of each of them alone would not necessarily have allowed one to draw.\textsuperscript{39} It is through systematic, comparative examination that one can acquire a thorough understanding of two or more legal concepts or mentalities.

For a comparison to be effective, it must be performed on like objects, as ‘incomparables cannot be usefully compared’.\textsuperscript{40} In law, the only elements that can be compared with each other are those that fulfil the same function.\textsuperscript{41} At first glance, land and maritime delimitation may seem too distinct to be compared. Land delimitation is based on the premise that by law a particular territory can belong to only one state – the state that holds the stronger or more convincing title.\textsuperscript{42} By contrast, maritime delimitation rests on the postulate that two or more states have an equal entitlement to the same area, which therefore must be divided between them on the basis of equity.\textsuperscript{43}

In practice, however, the two delimitation processes are closely related. As stressed by the International Court of Justice (ICJ) in 1978, whether it is a land or a maritime boundary that is in question, ‘the process is essentially the same, and inevitably involves the same element of stability and permanence’.\textsuperscript{44} In both situations, the purpose of establishing an international boundary is to mark the limits of two contiguous jurisdictions in a final and peaceful manner.\textsuperscript{45} As similarly expressed by scholars, ‘[t]he
motives for drawing boundaries on land and sea are identical’ and ‘the
procedures by which States . . . produce boundaries on land and sea have
much in common’. 46 Therefore, it will be interesting to see whether the
treatment of private rights is a matter on which the two delimitation pro-
cesses converge or diverge.

Besides, the law of the sea has been largely governed by the principle of
domination, according to which ‘the land dominates the sea’. 47 This means
that the powers that coastal states exercise in the ocean are derived from
their sovereignty on land. 48 It also explains the application of certain land
delimitation principles in maritime boundary-making. 49 The principal
techniques now used in maritime delimitation, such as the median line/eq
uidistance, were first developed by land geographers like Boggs, before
being adopted by ocean-boundary experts. 50 Likewise, the configuration
of the coast, which is a land feature, and the principle that the seabed is
a natural prolongation of the state’s land play a fundamental role in

46 Prescott (n 1) 24. Likewise Weil (n 3) 94: ‘the process of maritime delimitation is and remains
an exercise sui generis . . . the dividing line to which it leads is undoubtedly very like a land
boundary’. On the legal and functional similarities between land and maritime boundaries
see also Tanja (n 6) 306. Perhaps the only difference is that, unlike many boundaries on land,
no maritime boundary has ever been forced on a state by another state.

47 Fisheries Case (n 24) 135; North Sea Continental Shelf Cases (n 27) para 96; Aegean Sea
Continental Shelf Case (n 44) 36; Maritime Delimitation in the Black Sea (Romania

48 North Sea Continental Shelf Cases (n 27) para 96: ‘The land is the legal source of the power
which a State may exercise over territorial extensions to seaward.’ Aegean Sea Continental
Shelf (n 44) 36: ‘[I]t is solely by virtue of the coastal State’s sovereignty over the land that rights
of exploration and exploitation in the continental shelf can attach to it . . . In short, continental
shelf rights are legally both an emanation from and an automatic adjunct of the territorial
sovereignty of the coastal State.’

49 Maritime Delimitation and Territorial Questions (Qatar v Bahrain) [2001] ICJ Rep 40, para
Perspective on the Adaptability of the Law of the Sea to New Challenges’ (2014) 57 German
Yearbook of International Law 1; C Schofield, ‘Defining the “Boundary” between Land and
Sea: Territorial Sea Baselines in the South China Sea’ in S Jayakumar, T Koh and R Beckman
(eds), The South China Sea Disputes and Law of the Sea (Edward Elgar 2014).

50 S Boggs, ‘Problems of Water Boundary-Definition: Median Lines and International
Boundaries Through Territorial Waters’ (1937) 27 Geographical Review 445, 453–56; D Rothwell
and T Stephens, The International Law of the Sea (Hart 2010) 385. Land
geographers were first to suggest that the method of equidistance (which was primarily used
for the delimitation of lakes and rivers) should extend to the delimitation of the maritime
zones.