

# *The rise of linear borders*

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### The Rise of Linear Borders

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### Summary and Keywords

Since roughly the late 19th century, international borders have generally been characterized by linearity, or the appearance as a series of one-dimensional points, connected by straight lines. Prior to this, various kinds of frontiers existed globally, some of them being more linear than others, but most included some kind of formal ambiguity. International relations (IR) often takes for granted the historical process which brought about the global linearization of borders, culminating in the late 19th century and still ongoing in ocean spaces and in outer space. But because cross-border relations are the main substance of inquiry in IR, many theories and areas of study in IR contain some perspective on that process, at least implicitly.

Keywords: borders, territory, global history, geography, sovereignty

Theories of linear borders can be traced back to geographers of the late 19th century and early 20th century, who were primarily concerned with issues of colonial administration, and then the First World War. Despite internal debates, this literature affirmed that the precise delimitation and demarcation of borders was an important part of a progressive Western civilization emanating from Europe. IR during the Cold War was less concerned with the nature of borders, the assumption being that all borders were already effectively linear. Yet the legacy of earlier border studies remained and set the context for discussions of how the drawing of linear borders might be related to “state failure” in the Global South. The rise to prominence of globalization narratives built on previous understandings of the history of borders, by anticipating a future era of borders declining in relevance. Other interventions have led in different directions, however, pointing to colonial history as central to the origins of linear borders, on one hand, and on the other hand anticipating not a borderless future but one in which borders are increasingly heterogeneous and ubiquitous.

### Introduction

Since roughly the late 19th century, international borders have generally been characterized by linearity, or the appearance as a series of one-dimensional points, connected by straight lines. Borders may be more or less evident within a landscape, may be more or

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less disputed, and may consist of a few long straight lines or follow the minute meanderings of a river. Moreover, the image of a line may not always be the best way to understand borders fully (Bialasiewicz et al., 2009). Yet to a remarkable degree, actors within and beyond states, across the world, regardless of local geophysical, cultural, or historical differences, assume and act as if all state territories are defined by borderlines that can be precisely located to any degree of precision. This chapter reviews the ways in which awareness of this virtually universal linearity, and the global historical process through which it emerged, has influenced scholarship in IR and beyond.

Linear borders are not an “invention” that can be dated to any singular place or time, and cases can be made for the existence of particular linear borders in various historical contexts. But up through at least the mid-19th century, borders specified in treaties as precise lines connecting particular points were the exception rather than the rule in vast areas of the world such as Southeast Asia (Thongchai, 1994), Africa (Ajala, 1983), and Latin America (Lalonde, 2002). Before this time, many different concept Bialasiewiczs and practices existed concerning the geographical edges of polities, which we can call “frontiers.” Consider, for example, the *khetdaen* of 19th-century Siam, consisting of a series of passes through thick forests and mountains (Thongchai, 1994, p. 75), or early modern France’s frontiers of entangled and heterogeneous jurisdictions (Sahlins, 1990). Some of the earliest efforts to ensure, as a general rule, the precise correspondence between lines on maps and borders in practice can be seen in North America in the 17th century (Branch, 2014). But these coexisted with boundaries that were partially left vague, such as the western part of the U.S.-British North America boundary in the early 19th century (Miles, 1957). Similarly in Western Europe, systematic efforts to specify borders as lines in treaties became common by the end of the 18th century, but particular borders such as the Spanish-French border remained partially vague into the late 19th century (Sahlins, 1989). The process of the linearization of borders is unlikely ever to be truly complete, with many ocean and outer space borders remaining undefined (Beery, 2016; Okonkwo, 2017). But the late 19th century arguably marks a turning point in efforts to apply linear borders globally (for more, see Goettlich, 2019).

Since the late 19th century, linear borders have been important in international thought but not always explicitly. In part because of the historical elimination of formally ambiguous frontiers, the way territories are defined is not often treated as a problem. One possible measure of territory has been universalized, making it difficult to imagine other possible measures. Sovereignty has often been subject to conceptual analysis in IR (Waltz, 1979, p. 95; Morgenthau, 1960, p. 312), and in recent decades historical analysis as well (Bartelson, 1995; Spruyt, 1994). In comparison, concern with the modern process and practice of demarcating borders has been seen as an important issue in the study of international politics in a relatively limited number of times and places. In the 21st century it is perhaps boundary technicians themselves who most consistently draw attention to the importance of their profession for the avoidance of territorial disputes (IBC, 2015), with little recognition from IR (although see Branch, 2017). Yet, as recently as the early 20th century, precisely marked and mapped borders could be recognized as an aspiration that

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made a difference in international politics, or as something that distinguished some polities from other polities that had vaguer frontiers.

The first part of the chapter deals with writers foregrounding these concerns, most prominently those working in the context of late-19th- and early-20th-century colonialism, after which scholarly interest in the topic somewhat subsided. At the same time, linear borders and their history have also been a crucial background element in many other debates. This article thus goes on to consider how linear borders have been important in how IR defines its field of inquiry, in debates on the efficacy of statehood in the Global South, on whether there is a norm of territorial integrity and what its consequences are, and on globalization and the transformation of borders.

## The Origins of Border Studies

Before the late 19th century, general arguments in favor of the precise demarcation of borders can be found in Western political writings. An early example of these is Emer de Vattel's statement, in his 1758 treatise *The Law of Nations*, that in order for a state to avoid encroachment on another state's territory, "The limits of territories ought to be marked out with clearness and precision" (Vattel, 2008, p. 308). His main example here was the undefined boundary between French and British colonies in North America, which he claimed was responsible for the outbreak of war between the two empires. As another brief example, Jeremy Bentham's "Principles of International Law" listed "amicable demarcations positively made" as one of the means of preventing interstate wars over boundaries, also citing overseas expansion as an area where this was particularly important (Bentham, 1818, pp. 539, 544).

It was not until the late 19th century, however, that a coherent body of literature began to form around the demarcation of borders. This era had seen a rise in importance and frequency of bilateral boundary commissions, as well as the emergence of a distinct academic subfield of border studies. As one prominent British boundary surveyor and geographer noted, "Truly this period in our history has been well defined as the boundary-making era" (Holdich, 1899, p. 466). In contrast to the occasional remarks previously by writers such as Vattel, political geographers during this period were more aware of the cultural and historical specificity of the practice of linear boundary demarcation. For many of them, linear boundaries were neither ubiquitous in human experience nor a trivial aspect of international politics, but instead, the linearization of borders was a historical process that accompanied and signified the superior civilization of Western states and peoples. With jurist Henry Sumner Maine's theory that law and society developed from status to contract, a shift from personal rule to territorial rule became part of a grand narrative of the development of all societies along the path of European nations (Sylvest, 2005; Anghie, 2005). Also influential were the many accounts given in geographical journals by boundary commissioners, telling of wild, natural landscapes inhabited by "tribes," which contrasted with the neutral, scientific lens of the European observer and sometimes resisted it with force (e.g., Nugent, 1914).

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From this context came two particularly influential narratives of the historical linearization of borders. One of them, having its origin in social Darwinism and Friedrich Ratzel's organicist political geography, focused on the origins of linear borders as an abstraction or reflection of certain kinds of underlying geopolitical competition between societies specific to European history (Febvre, 1973). This argument was perhaps made most explicitly by Ellen Semple, one of the main theorists of geographic determinism in Anglophone scholarship. Linear political boundaries were drawn along racial and linguistic boundaries, which owed their narrowness to the exploitation of every last bit of land, which was characteristic of the "oldest and most advanced states" (Semple, 1907, p. 396). On one hand, "A straight, narrow race boundary, especially if it is nearly coincident with a political boundary, points to an equilibrium of forces ... Such boundaries are found in old, thickly populated countries" (Semple, 1907, p. 390). On the other hand, "savage and barbarous peoples" who do not use land efficiently "will often sell their best territory for a song. For the same reason they leave their boundaries undefined; a mile nearer or farther, what does it matter?" The same aspects of civilizational advancement that constituted geopolitical competitiveness were also the causes of the linearization of borders.

Another narrative focused on the specification of linear boundaries as a result of the ingenuity of Western modernity, not in terms of internal societal organization but rather in setting limits to the external ambitions of states and promoting international peace. This narrative is best exemplified in a lecture by Lord Curzon, previously the Viceroy of India and later U.K. Foreign Secretary. According to Curzon (1907, p. 49), "In Asia, the oldest inhabited continent, there has always been a strong instinctive aversion to the acceptance of fixed boundaries." Curzon contrasted this with modern Western technical practice of boundary making, the idea of which is "itself an essentially modern conception," with its procedures, international legal framework, and surveying technology. As a result of European imperialism and the global influence of European agents, vague and "primitive" frontiers have been replaced by linear borders, which are "undoubtedly a preventive of misunderstanding, a check to territorial cupidity, and an agency of peace" (Curzon, 1907, p. 48).

These two narratives on modern borders in one sense had substantially different logics. For Semple, the practice itself of demarcation was less important than the underlying geopolitical pressures which caused boundaries to become linear, while for Curzon, border demarcations had potential to hold aggressive nations in check. Yet both emphasized the specificity of linear borders and explained their emergence as a part of Western modernity.

During and after the First World War, the focus of border studies turned to Europe, as geographers knew well that many borders would have to be created at the end of the war and would be intensely debated. Geographers, along with historians and other academics, were closely involved in the postwar planning of borders through various governmental organizations, most notably the "Inquiry" set up by U.S. President Woodrow Wilson (Gelfand, 1963). Semple was among those writing policy recommendations on borders, in both Europe and the Middle East, although she was not invited to attend the Paris Peace

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Conference. Perhaps because of the demands made by national governments in this context, the question of where on the map to draw boundaries gradually took precedence over the practices and observations of boundary commissions themselves.

The transition away from investigation into the particularity of linear boundary making can be seen in the emergence of interest in the differing “functions” of boundaries, beginning in the 1930s. This was related to a growing perception that linear boundaries were in fact universal, in contrast to geographers of a few decades previously. With much of the world having been divided up with more-or-less well-demarcated linear borders, the imperial powers’ need for greater attention to the demarcation of borders *per se* as a process and practice subsided. As Boggs (1940, p. 3) noted, “To most people, frontiers look alike and are assumed to be alike ... it is only natural that the role played by international boundaries is commonly assumed to be uniformly simple and static.” In response, Boggs urged geographers to consider instead how “the effect of the boundary on the life of adjacent populations must differ, for example, in the United States-Canada boundary area, the Libya-Tunisia frontier region, and the China-Burma frontier region in areas inhabited by unadministered tribes.” On one hand, this enabled Boggs and others to open up inquiry into a wide range of important phenomena, such as the regulation of migration and land usage. On the other hand, it drew focus away from the ways in which borders are globally similar and the connected global history of the practices of drawing linear borders. This transition continued into the late 20th century with J. R. V. Prescott’s influential approach to studying borders, which focused on tracing the historical evolution of individual borders, particularly through the accumulation and close analysis of all relevant documents. According to Prescott (1987, p. 8), “Attempts to produce a set of reliable theories about international boundaries have failed. Attempts to devise a set of procedures by which boundaries can be studied have been successful.” While Prescott’s approach laid more emphasis on boundary disputes than the functional approaches of the mid-20th century, the overall tendency was away from generalizations about boundaries toward the study and comparison of individual boundaries, within their particular geographical contexts.

## International Relations: Historicity of Borders as an Implicit Assumption

While geographers came to take for granted the precise nature of borders, IR in turn came to be distanced from geography (Ashworth, 2013). Carr (1940, p. 292) had acknowledged that “In no previous period of modern history have frontiers been so rigidly demarcated ... It is difficult for contemporary man even to imagine a world in which political power would be organised on a basis not of territory, but of race, creed or class.” But in the postwar era, the precision of borders was seen less as a goal or as a practice, and more as part of the long-established foundations of the state system and international law (Morgenthau, 1960). The Cold War saw IR increasingly based parsimoniously on abstractions such as anarchy and the ideal-typical state, becoming more clearly separated from

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political geography (Waltz, 1979). From this perspective, international politics worked within linear borders, which occasionally moved positions but were conceptually quite simple and unchanging, and the ability to know where they were seemed a relatively trivial concern belonging to technical experts. International law preserved an explicit injunction on states to define their borders precisely, following the League of Nations' World Court, in a 1925 decision on the boundary between Turkey and British-mandated Iraq, that "the very nature of a frontier and of any convention designed to establish frontiers between two countries imports that a frontier must constitute a definite boundary line throughout its length" (Schwarzenberger, 1957, p. 313). But IR has, on the whole, been quite unconcerned with how territory is defined. Sovereignty was for Waltz (1979, p. 95), "a bothersome concept," and for Morgenthau (1960, p. 312) there has been "much confusion about the term," but when it comes to territory and borders, many of the canonical texts of IR lack conceptual discussion or even definitions (Bull, 1977; Morgenthau, 1960; Waltz, 1979).

At the same time, particular understandings of the historical emergence of modern borders implicitly remained in IR. Because the precise demarcation of boundaries came to be as part of the established background of international relations, it crept into discussions of state sovereignty. While modern borders themselves were not usually examined in detail, their supposed appearance on the European political stage played an important role in identifying the distinction between modern international politics and medieval systems of rule. For Morgenthau (1960, p. 276), for example, "The great political transformation that marked the transition from the Middle Ages to the modern period of history ... can be summed up as the transformation of the feudal system into the territorial state." In order for some measure of "peace and order" among states, there must be certain "rules of conduct." "States must, for instance, know where the frontiers of their territory are on land and sea." As Osiander (2001, p. 266) has pointed out, IR created a mythology explaining these rules of conduct, "such as territoriality, sovereignty, equality, and nonintervention" as products of the 1648 Peace of Westphalia. Despite the concept of territoriality receiving little attention, it was nevertheless packaged in with sovereignty as one of the fundamentals of modern international relations.

In IR, the most prominent explanations for this epoch-defining emergence of modern territoriality foregrounded power-political competition underlying the institution of borders, as in the geopolitical tradition of Semple and Ratzel. A good example of this is John Herz's (1957) article "Rise and Demise of the Territorial State." With the threat of nuclear war imminent, Semple's focus on changes in the use and valuation of land was replaced with developments in military technology. But the basic idea of linear boundaries developing as a rational response to intense competition over territory remained. According to Herz, once gunpowder artillery was able to destroy large walls, castles were replaced as the best protection for political communities by a "hard shell" of frontier fortifications "lining the circumference of the country" (Herz, 1957, p. 477). One could draw the conclusion, then, that the emergence of modern borders was a by-product of underly-

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ing power politics, in this case not through pressure on land usage but through the linear fortifications which established the extent of the state's reach.

This logic continues to operate in more recently influential accounts of the origins of the modern state. Charles Tilly's (1992) *Coercion and Capital*, while in general saying very little about borders themselves, does refer to the formation of recognized boundaries as crucial for identifying the concurrently emerging distinction between "war-making" and "state-making." In a few short passages, Tilly explains modern boundaries, as with much of the basic content of the modern state, not ultimately as a result of particular land usages, nor of specific military technology, but rather the need for greater revenue to fund war through more precise taxation and the collection of customs duties (Tilly, 1992, pp. 88, 98). For Spruyt (1994), in a somewhat similar fashion, the institutional design of the centralized state inherently implies a clear geographical separation from other polities, and it was this centralized state which proved superior to its competitors. Thus, while differences in emphasis existed, many writers from Semple to Spruyt agreed on looking for the origins of modern territoriality as a response to the struggle for power on the European continent in the transition to modernity. The border itself, either as a juridical concept, or as a material practice of demarcation, was unimportant for these scholars except as an outcome of any number of other features which gave states an advantage in competition with their neighbors.

## "Fixed" and "Colonial" Borders

Two different developments in the world politics of the second half of the 20th century brought greater attention, in discussions of borders, to international law, ideas, and historical change, which had in general been sidelined by the dominance within IR of the realist approach. The first was the formal decolonization of much of the Global South, particularly the continent of Africa, where straight-line boundaries were most visible on the map. In 1958 the All African People's Congress in Accra denounced "artificial frontiers drawn by imperialist Powers to divide the peoples of Africa" and called for "the abolition or adjustment of such frontiers at an early date" (Ajala, 1983, p. 182). By bringing into question the future of postcolonial boundaries, this made it more difficult to ignore boundaries that did not fit the narrative of European boundary formation as an outcome of the competitive building of national states.

That narrative of European border history, however, was ultimately reinforced through an understanding of how linear borders emerged in Africa as a starkly different, almost opposite process. "Unlike many of the world's borders," as Zartman (1965, p. 155) put it, boundaries in much of Africa "are not the walls and moats of history, natural defence lines whose traces mark the military conflicts and diplomatic compromises of the nation's past." This apparently debilitated the legitimacy of these borders, but also removed motivations for changing them: "The might of conquest and the right of diplomacy have not sanctified the borders, but the Schleswigs and the Alsace-Lorraines are not present either."

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In contrast to Europe, linear borders in Africa were a sudden, “arbitrary” imposition by the colonial powers in the late 19th century. Rather than Semple’s understanding of linear boundaries as the frontlines of struggles among the most advanced peoples, this owed more to Lord Curzon’s interest in modern boundaries as a juridical institution, historically diffused through colonial agents. For Herbst (1989), for example, the rapid creation of African borders in the late 19th century, uninformed by detailed knowledge of local circumstances, as well as their retention by postcolonial states, was a “rational” response to the larger context of international politics. By elaborating a set of “decision-making rules” using boundaries, the colonial powers, and later the postcolonial states, were able to minimize warfare over territory without maintaining prohibitively expensive armies. Thus, on one hand, according to the standard set by European history, the norm was for linear boundaries to evolve out of a competitive interstate framework, backed by the political-economic power of states. On the other hand, in much of the colonial world, boundaries were a collaborative institution initially agreed upon by the imperial powers and in ignorance of local conditions.

The contrast between the narratives of the origins of modern borders in Europe versus the colonial world had an important impact on discussions of “failed states” or “quasi-states” in the Global South. The dichotomy between European boundaries derived from power politics, and non-European boundaries depending on international recognition, is often seen as related to state weakness. States with little presence outside a capital city, the argument goes, persist because the international community recognizes the colonial borders, which are seen as immutable (Jackson, 1990). Scholars also debate more generally whether there is an international norm of “border fixity” or “territorial integrity,” and whether this produces peace or conflict. On one hand, Zacher (2001, p. 246) argued that the decline in border alterations through force has “largely eliminated what scholars have identified as the major source of enduring rivalries and the frequency and intensity of warfare.” Neoliberal institutionalists, similarly, have argued that states can reduce transaction costs and produce mutual gains through fixed borders (Simmons, 2005). On the other hand, weak states whose borders depend on international recognition rather than their own strength lack an incentive to make sacrifices necessary for building power and legitimacy, which in turn perpetuates weakness and spreads intra-state conflict (Atzili, 2006–2007).

The global history of border demarcation has not been explicitly examined in these discussions, but they implicitly draw on geographic ideas such as those of Semple and Curzon. According to Semple’s logic, the civilizational advancement of peoples proceeds in one direction, toward greater capacity to use, value, and defend even the most minute pieces of territory incorporated by linear boundaries. It is in the context of this relationship between development and the historical linearization of borders that it makes sense to argue that the persistence of boundaries imposed by external and distant powers would stunt the development of weak states. Underlying the idea of artificial boundaries is the implicit assumption, argued explicitly by Semple, that there are natural or organic

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boundaries underlying international politics, and that juridical boundaries typically are or should reflect such organic boundaries.

Similarly, the idea of a “fixed border norm” being conducive to world peace is connected to Curzon’s (1907, p. 54) claim that “Frontiers, which have so frequently and recently been the cause of war, are capable of being converted into the instruments and evidences of peace.” One distinction between them is that for Curzon, “fixed boundaries” meant well-defined linear boundaries, while later scholars have assumed that boundaries are always already well-defined and linear wherever they are and have opposed “fixed boundaries” not with ambiguity but with attempts to change boundaries forcefully. But these are not unrelated ideas, as defining a boundary in linear terms necessarily implies restricting it from moving, at least temporarily. Curzon (1907, p. 49) contrasted the modern institution with the customs of “Asia,” where the idea was prevalent that “in the vicissitudes of fortune more is to be expected from an unsettled than from a settled Frontier.” Persia and the Ottoman Empire, for example, had been dragging their feet for many decades against Western pressure to define their border because they found “in these unsettled conditions an opportunity for improving their position at the expense of their rival.” Only by fixing the position of the border, then, could stability be brought to the region (see also Holdich, 1899, p. 467).

Critics of the notion of “failed states” also bring attention to linear borders and have argued that such narratives are related to the perspectives from which colonial borders were drawn. That some states lack a monopoly over legitimate violence is not because Western powers have been “unduly charitable” in their insistence on recognizing post-colonial sovereignty within pre-given borders but is in large part due to continued Western intervention of many kinds (Grovogui, 1996, p. 183). Contrary to the arguments of Curzon and many others that an institution of fixed, recognized international borders are evidence of juridical fairness or equality, they can also be seen as “part of the toolkit of power politics, say when a great power grants or withholds sovereign recognition to other entities in accordance with its interests” (Barkawi, 2017). The fixity of borders has indeed relatively recently been tied closely to sovereignty (Jackson, 1990), but this makes it possible to imagine that if a state’s borders are intact and unchanged, its sovereignty must have been respected. In this way, fixed borders are part of the legitimization of what many have argued are international hierarchies (Zarakol, 2017).

At the same time, if we instead criticize the colonial powers for drawing “artificial” borders that pose obstacles to the formation of national communities, we risk implying that “natural” borders exist. The insights of a wealth of debate and criticism in political geography over this idea of natural borders, since the late 19th century, have been conspicuously absent in recent discussions of “failed states” (Fall, 2010). Many refer to the idea as discredited and find it to be historically correlated with expansionism (Prescott, 1987, p. 110). The implication of the concept of “artificial” colonial borders is that the problem of imperialism was its failure to reproduce European civilization outside Europe properly, and that it should have done so better by instead imitating Europe’s “natural” boundaries. In some cases, this apparent artificiality has prompted observers to contemplate

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creating new linear borders in different places, for example in the Middle East, where the 1916 Sykes-Picot Agreement, made between Britain and France to coordinate colonial administration, has recently received much attention (Bilgin, 2016). Any external effort to redraw borders such as these would likely be difficult to distinguish from a new kind of colonialism, either from a social science perspective or in the views of those affected by it.

## Globalization and the Future of the Nation-State

The other major development that influenced the implicit and explicit history of boundaries in IR was the set of various processes going under the label of “globalization.” The obsolescence of national territories had been debated in the early 20th century, in the context of schemes for transnational integration, for example, or the anticipated effect of airpower on warfare (Pemberton, 2002; Rosenboim, 2017). But an increase in concern with the term “globalization” itself began around the 1980s, compounded by the end of the Cold War. As Agnew (1994, p. 55) noted, “The present historical moment has made the nature of spatiality in a wide range of fields an open question in ways that it has not been since the early part of this century.” Although linear borders themselves are a globalized phenomenon, enabling a homogenous definition of territory worldwide, borders were often seen as obstacles to the flows of things, people, and ideas which constituted globalization. An extreme example of this is in Kenichi Ohmae’s (1990) *The Borderless World*, a best-seller aimed at corporate managers but attracting widespread interest in IR and geography, which heralded the advent of the truly global corporation without a national center.

The content of these globalization narratives was generally not centered on the removal of linear borders themselves, as a particular way of specifying national jurisdictions, but rather on the limitation of what is governed by national jurisdictions, borders or no borders. Only one European state border, the Inner German Boundary, has actually been eliminated since the end of the Cold War, through its transformation into several internal administrative borders. Nevertheless, the history of borders that often lies behind this idea of the coming “borderless world” is connected with the narratives of Semple and Curzon, in that the transformation of borders is seen as an important marker of the progression of world history. While *The Borderless World* said little about anything occurring specifically in the geographical peripheries of states, its use of the “border” as a symbol for a certain type of world divided into nation-states has become commonplace. This hyper-globalization discourse broke significantly with Semple and Curzon, however, in seeing borders as a phase which is ending, belonging properly to the past rather than the future. More than ever before, borders came to be seen as a part of distant European history, particularly the Peace of Westphalia, which may or may not continue to be relevant. While Semple and Curzon had seen the emergence of linear borders as an advance of civ-

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ilization, borders were now seen as the defining symbol of what would be swept away in the creation of a new global stage of civilization.

This historical framework comes through perhaps most clearly in John Ruggie's (1993) article "Territoriality and Beyond," arguing that territorial states were becoming not irrelevant but "unbundled," particularly within the European Community. The best way of understanding the system-transforming effects of the "remarkable growth in transnational microeconomic links over the past thirty years or so" would be to first understand the historical origins of modern territoriality (Ruggie, 1993, p. 121). He explained this transformation through a combination of altered "material environments," such as economic factors and military technology, and change in "social epistemes," such as the "dominance of the 'I-form' of speech" in discourse and the single-point perspective in visual arts.

This article was relatively novel within IR, in that it acknowledged not only that territoriality had to emerge historically but also that it could emerge in different forms. Medieval Europe, contrary to the prevailing wisdom, had in fact been organized into territories. The "striking" difference with the modern world was that these territories were "geographically interwoven and stratified" rather than exclusive and formally equivalent, and that instead of linear boundaries there were only frontiers, or "large zones of transition" (Ruggie, 1993, p. 149). The article reinforced the conventional tendency to see modern territoriality as a product of an isolated, autonomous 16th- and 17th-century Europe. But at the same time, it opened up the possibility of problematizing the concept of territoriality rather than treating it as self-evident in meaning, or as a condition which is simply present or absent.

As the years passed since the end of the Cold War, it became clear that the nation-state would not become irrelevant any time soon, nor would modern territoriality be altered as fundamentally as some had anticipated. As various scholars argued, borders were still proliferating and solidifying after the end of the Cold War, particularly in the form of walls and fences (Brown, 2010; Foucher, 2007). These lines of thought bifurcated into two different agendas which are of interest here but have had relatively little contact with one another (see Kadercan, 2015). One major development was the emergence of the historical transformation of international systems as an object of inquiry in IR, which was seen as distinct from "traditional" IR approaches seeking to explain changes within a fixed international system, defined as states under anarchy. While abandoning more exaggerated predictions that the nation-state underpinning conventional IR was becoming obsolete, many IR scholars took this renewed interest in change over the longue durée as an opportunity for further research. Much of this literature can be broadly divided into analyses centering on patterns of coercion and capital accumulation on one hand and those centering on ideas and discourse on the other. The overlapping categories of "bellicist," "neo-Weberian," or "historical institutionalist" scholarship, despite internal debates, share a concern with the production and use of armed forces, the means and ends of gathering wealth, and the relationship between the two (Tilly, 1992; Spruyt, 1994; Abramson, 2017; see also Sassen, 2006). Meanwhile, for a number of constructivists, among others, the emergence of the international system demonstrated the ability of ideas and discourse to

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constitute the basic assumptions defining relations between polities (Reus-Smit, 1999; Philpott, 2001; Bartelson, 1995). Because capitalism is both a set of ideas and at the same time a particular relationship between coercion and capital accumulation, Marxist analyses potentially straddle this divide, emphasizing the capitalist separation of economics and politics in the creation of the modern sovereign state (Rosenberg, 1994; Teschke, 2003).

These works provided a compelling alternative to the prevailing assumption that the search for timeless principles should take precedence over a more historical mode of analysis. Yet particular compromises of sovereignty were historicized separately, such as multilateralism (Reus-Smit, 1999) or intervention (Philpott, 2001), and taken together, they lacked a coherent framework for understanding changes in territoriality (Goettlich, 2019). The concept of “territorial sovereignty” often served as a common reference point for historical explanation, and Robert Sack’s (1986) definition of territoriality was often cited, pointing to classification by area, social communication of this area, and an assertion of control over the area. But differing and mostly implicit ways of specifying this definition for the purposes of state territoriality led to different conclusions about when it emerged. While France may have established effective control over a large area by the 14th century (Spruyt, 1994), it did not establish specific boundary lines with its neighbors until the 18th century (Branch, 2014). Here, the definition of territorial sovereignty makes a difference of about four centuries. In this way, it could be argued that IR literature, when taken together, exhibits a certain confusion about the role of linear borders in the concept of territorial sovereignty.

This may partly explain why there has been little research into where and when in global history, let alone why, linear borders were formally demarcated, separately from the question of how territory became the main object of governance. French historians have delved deep into these questions where they concern the borders of France, and to some extent more globally (Nordman, 1998; Foucher, 1988). This has had a limited impact on Anglophone scholarship, which tends to assume that territorial sovereignty, in one way or another, is a sufficient explanation for linear borders. An important exception to this is Peter Sahlins’s (1989) history of the Franco-Spanish border, arguing from extensive archival research that a formal linear border came only in the late 19th century, from local demands to resolve local disputes, set against centuries of state officials’ indifference. This would contradict the aforementioned narrative of border linearization through geopolitical competition and conflict. There are also many other accounts of the linearization of borders in specific areas, although these tend to make only limited claims about linear borders more generally (e.g., Thongchai, 1994; Ateş, 2013).

Linear borders did matter more explicitly, however, for a subset of the literature on territorial sovereignty that focused on the role of maps. There had been a movement within the history of cartography to view maps not as accurate or inaccurate but instead as a site of politics (e.g., Harley, 1989; Edney, 1997). Rather than simply reflecting the relationship between politics and space in any given context, maps made possible certain spatial configurations of politics, especially where maps are perceived to be neutral and sci-

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entific. This perspective on the politics of cartography led to contributions in IR arguing that the modern linearly bounded definition of political authority is made possible by techniques which allow us to represent and imagine space in particular ways (Branch, 2014; Strandsbjerg, 2010; Larkins, 2010). Ptolemy's *Geography*, an ancient Greek text discussing lines of latitude and longitude and the proportional representation of the spherical Earth on flat maps, arrived into Western European scholarly awareness in the 15th century, and Western cartographers began using its techniques in the 16th century (Branch, 2014, p. 51). Only with such proportional representation does it become possible to draw a boundary line on a map having precisely the same contours as it does on the ground. When European maps began to show land as divided by lines into different regions, these regions at first had no straightforward political meaning. But as states began to conduct systematic surveys of their territory, cartographers began to make these lines correspond as accurately as possible to state boundaries.

One of the implications of this line of inquiry made an important break with assumptions about the historical origins of linear borders made by Curzon and Semple, and many following them. Unlike those viewing territoriality as an outcome of the making of national states, the focus on techniques of mapmaking drew attention to colonial encounters as sites of innovation and change. In particular, the Spanish-Portuguese Treaty of Tordesillas and imperial land grants such as those of France in Acadia (1603) and England in Virginia (1606) can be seen as closer precursors of modern territoriality than contemporary territorial agreements in Europe. This is because the former were specified in texts describing linear outside limits, while within European treaties such as those of the Peace of Westphalia (1648) it was more common to specify territories by listing places and jurisdictions. For example, one "item" returned to Austria in the Peace of Westphalia included "the Upper and Lower Brisgaw, and the Towns situate therein, appertaining of Antient Right to the House of Austria, viz. Neuburg, Friburg, Edingen, Renzingen, Waldkirch, Willingen, Bruenlingen, with all their Territorys" (Israel, 1967, p. 35).

Only in the 18th century did the precise definition of boundary lines start to become regular practice in European treaty making, to be further entrenched following the 1815 post-Napoleonic settlement. Unlike the Peace of Westphalia, the charter of Massachusetts Bay (1629) granted authority over "that Parte of America ... from Forty Degrees of Northerly Latitude from the Equinoctiall Lyne, to forty eight Degrees of the saide Northerly Latitude inclusively, and in Length ... throughout the Maine Landes from Sea to Sea" (Thorpe, 1909, p. 1846).

Unlike the territories described in the Peace of Westphalia, boundaries were being defined in the Americas that, in theory, could be located with any degree of precision. Why did European imperialists specify these overseas territories in a way that would have been so unusual in the European context? Part of the answer has to do with the ways of representing space homogenously and proportionally that were becoming increasingly widespread in Europe at the time. In the absence of much detailed geographical knowledge of the places they laid claim to, Europeans found that empty, unknown spaces opened up by the homogenous scale of a proportionally representative map could be con-

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veniently allocated by simply drawing lines. While it would be difficult to linearize European boundaries involving countless ill-defined jurisdictions with all manner of overlapping rights and privileges, the rest of the world potentially represented, for Europeans, a clean slate without such encumbrances.

Cartography does not completely answer the question, however. As Benton (2010) has pointed out, clear lines drawn on maps can be deceptive, with both legal and actual power having more complicated and ambiguous geographies, especially before 1900. It would be dangerous to mistake utopian imperial aspirations for historical reality, or to read the literature on cartography as assuming that the ability to map lines can explain how legal and physical geographies were ordered along linear boundaries. The exact location of the Treaty of Tordesillas line, for example, was to be determined by a commission that never met, and so Spain and Portugal largely maintained clearly diverging positions (Sandman, 2007, p. 1108). Moreover, while concepts such as latitude and longitude were new for Western Europe in the 15th century, they were not new for medieval Islamic scholars, who had long been using Ptolemy's concepts of latitude and longitude (Tibbets, 1992). If features of modern mapping such as latitude and longitude have long existed, why did modern territoriality not appear in other places and times? Further research in this area could benefit from examining in more detail the connection between mapmaking practices and that which drove colonial governments to actually locate boundaries on the ground and enforce them in practice.

Another direction taken in response to the globalization narratives of the 1990s had less to do with the historical origins of borders and more with a broadening and deepening of what was understood to be a border in the first place. The fading from view of some European borders had not set any necessary precedent for the rest of the world, nor was it guaranteed to be permanent, as the collapse of the Soviet Union and Yugoslavia had only created more interstate borders, and nationalism appeared to be on the rise globally. New engagements between International Relations and geography appeared, such as an awareness of what John Agnew called the "territorial trap," or the reification of territory and the assumption that territorial formations in society are logically or historically prior to international relations (Agnew, 1994). The extent to which states use the linearization of borders to centralize and monopolize authority on where borders are, in an apparently objective and scientific way, has to be seen as a political activity rather than a complete picture of what societies look like.

In this context, many scholars continued to be dissatisfied with taking borders for granted, but rather than predicting the disappearance of borders, in various ways they called for an alteration of our basic understanding of borders (Newman & Paasi, 1998). They criticized the conceptualization of borders in IR and earlier geography as too simplistic. An important trend within this literature was to emphasize the social construction of borders as the spatialization of the division between a "self" and an "other" (Paasi, 1996). It is this social construction which allows states and national narratives to legitimate territorial political aims and make them appear natural. One question raised, then, would be whether borders are sites of difference that are an inescapable part of all being, or to

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what extent the privileging of such sharp oppositions is particular to Western metaphysics (Bialasiewicz et al., 2009, p. 584). Another important idea in these discussions was the “heterogeneity and ubiquity of borders,” with borders understood as a symbol for the functions typically thought of as being performed along a linear border, especially control over the movement of people (Balibar, 2002, p. 84). As the U.K. Home Office put it, “The border has been traditionally understood as a single, staffed physical frontier ... This philosophy will not deal effectively with the step change in mobility that globalisation has brought to our country” (quoted in Vaughan-Williams, 2009, p. 17).

As states and interstate institutions perceived new threats and opportunities from intensifying flows of migration and commerce, practices normally associated with borders were dispersed widely rather than concentrated at certain points. In response to these dynamics, a group of scholars under the label of “critical border studies” emerged around the goal of forming “new border concepts, logics, and imaginaries that capture the changing perspective on what borders are supposed to be and where they may be supposed to lie” (Bialasiewicz et al., 2009, p. 583; Parker & Vaughan-Williams, 2014).

In these literatures, the historical emergence of linear borders played a somewhat less obvious role, though still an important one. The idea that border geographies were changing, and that the naturalized concept of the border as a line was not to be taken for granted, was closely related to the historical contingency of borders. If borders could become linear historically, they could also become more dispersed and complex. But perhaps more importantly, for critical border studies, the image of borders as static lines was a profoundly problematic limitation on how borders were being studied and had to be replaced with more dynamic notions such as borders as practices. Of course, it could be argued that borders, whether linear or more complex, already consisted of practices. Maintaining the perception of linear borders as a universal definition of territory requires all manner of technical practices of demarcation, and the historical linearization of borders is what has made the “territorial trap” convincing and powerful. Yet the practices that were most explicitly at issue in this literature were those that expanded borders beyond linear configurations.

Moreover, the work on borders in a postmodern vein or as “critical border studies” shares with the literature on cartography in the history of international relations a broad concern for technology and expertise. Whether bordering technologies are understood through the lens of biopolitics (Amoore, 2006), drawing on science and technology studies (Bourne et al., 2015), or from a more historical perspective (Branch, 2014; Strandsberg, 2010), the many kinds of devices, experts, and practices that are of interest are arguably those that make borders linear or otherwise. For Walters (2002, p. 563), for example, it is important to make a historical distinction between the origins of a recognizable European state system in the 17th century and the demarcation of linear borders beginning in the mid-18th century. Instead of seeing the border as a “physical geographical line,” this draws attention to the “commissioners, topographical inquiries, and surveys of engineers,” which are required to linearize the border (Walters, 2002, p. 564). Stuart Elden’s work on the historical origins of territory, while considering borders to be a “sec-

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ond-order problem,” develops a similar notion of territory as a “technology,” meaning that it “comprises techniques for measuring land and controlling terrain” (Elden, 2010, p. 811). The connections between historical research agendas and those of poststructuralism, science studies, and related areas, however, have in general been relatively seldom explored, and could prove fruitful for future work.

## Conclusion

This chapter has reviewed IR and cognate disciplines in terms of the role of linear borders. “Linear borders” here means the formal and technical demarcation of borders as precise lines, and the historical process by which they emerged in international politics as the presumed indication of a polity’s extent. In doing so, the overall impression that emerged from the literature surveyed is that linear borders play a potentially central role but are, in themselves, understudied in important ways. They have often been invested with great symbolism or served as an important marker in world historical terms, as indicating the advent of a global (or, more often, European) modernity, and more recently as a measure of the extent to which a “Westphalian” order might be in crisis. The origins of linear colonial borders, and their consequences for the many postcolonial states that continue to preserve them, have also been important in debates on statehood in the Global South. Despite many criticisms, the idea that “artificial” lines drawn across mostly blank maps by colonial officials are to blame for current state weaknesses is influential in academia and beyond. At the same time, these debates do not draw on any clear body of historical research systematically investigating the times and places that linear borders emerged, or why they were drawn in the way they were. The study of such questions, in large part, has been subsumed into the study of sovereignty, which is analytically and historically distinct. This has resulted in some amount of confusion, and it points toward possible future research.

A better understanding of the historical process of the global linearization of borders would not only help scholars make better supported claims about modern territoriality but would also help clarify the legacy of colonialism in our understanding of territoriality. Our theories of borders are bound up in the global practice of demarcating borders, giving them a link particularly to a historical era when that practice was especially active and attributed with much international political significance. That era took place between the late 19th century, when writers such as Henry Sumner Maine tied civilized society explicitly to the concept of territory, and the interwar period, when it was increasingly assumed that international borders worldwide had generally been successfully determined. In the absence of much systematic study more recently of the history of linear borders, scholars of border studies during that time, such as Curzon and Semple, have remained influential. Many insights of more recent scholarship, such as the impossibility of natural borders and the claim that linear borders are a product of the colonial encounter, contradict the border studies scholarship of the colonial era. Yet it remains for future work to

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examine the legacy of those writers and to fully reevaluate their theories in light of the global history of linear borders.

## References

Abramson, S. F. (2017). The economic origins of the territorial state. *International Organization*, 71, 97–130.

Agnew, J. (1994). The territorial trap: The geographical assumptions of international relations theory. *Review of International Political Economy*, 1(1), 53–80.

Ajala, A. (1983). The nature of African boundaries. *Africa Spectrum*, 18(2), 177–189.

Amoore, L. (2006). Biometric borders: Governing mobilities in the war on terror. *Political Geography*, 25(3), 336–351.

Anghie, A. (2005). *Imperialism, sovereignty, and the making of international law*. Cambridge, U.K.: Cambridge University Press.

Ashworth, L. (2013). Mapping a new world: Geography and the interwar study of international relations. *International Studies Quarterly*, 57(1), 138–149.

Ateş, S. (2013). *Ottoman-Iranian borderlands: Making a boundary, 1843–1914*. Cambridge, U.K.: Cambridge University Press.

Atzili, B. (2006–2007). When good fences make bad neighbors: Fixed borders, state weakness, and international conflict. *International Security*, 31(3), 139–173.

Balibar, E. (2002). *Politics and the other scene*. London, U.K.: Verso.

Barkawi, T. (2017). **Empire and Order in International Relations and Security Studies**. *Oxford Research Encyclopedia of International Studies*.

Bartleson, J. (1995). *A genealogy of sovereignty*. Cambridge, U.K.: Cambridge University Press.

Beery, J. (2016). Unearthing global natures: Outer space and scalar politics. *Political Geography*, 55, 92–101.

Bentham, J. (1818). *The works of Jeremy Bentham* (Vol. 2). London, U.K.: Simpkin, Marshall, & Co.

Benton, L. (2010). *A search for sovereignty: Law and geography in European empires, 1400–1900*. Cambridge, U.K.: Cambridge University Press.

Bialasiewicz, L., Bulmer, S., Carver, B., Durie, R., Heathershaw, J., van Houtum, H., ...

Williams, J. (2009). Lines in the sand? Towards an agenda for critical border studies. *Geopolitics*, 14(3), 582–587.

## The Rise of Linear Borders

---

Bilgin, P. (2016). What is the point about Sykes-Picot? *Global Affairs*, 2(3), 355–359.

Boggs, S. W. (1940). *International boundaries: A study of boundary functions and problems*. New York, NY: Columbia University Press.

Bourne, M., Johnson, H., & Lisle, D. (2015). Laboratizing the border: The production, translation and anticipation of security technologies. *Security Dialogue*, 46(4), 307–325.

Branch, J. (2014). *The cartographic state: Maps, territory, and the origins of sovereignty*. Cambridge, U.K.: Cambridge University Press.

Branch, J. (2017). Territorial conflict in the digital age: Mapping technologies and negotiation. *International Studies Quarterly*, 61, 557–569.

Brown, W. (2010). *Walled states, waning sovereignty*. New York, NY: Zone Books.

Bull, H. (1977). *The anarchical society: A study of order in world politics*. London, U.K.: Macmillan.

Carr, E. H. (1940). *The twenty years' crisis, 1919–1939: An introduction to the study of international relations*. London, U.K.: Macmillan.

Curzon, G. N. (1907). *Frontiers*. Oxford, U.K.: Clarendon Press.

Edney, M. (1997). *Mapping an empire: The geographical construction of British India, 1765–1843*. Chicago, IL: Chicago University Press.

Elden, S. (2010). Land, terrain, territory. *Progress in Human Geography*, 34(6), 799–817.

Fall, J. J. (2010). Artificial states? On the enduring geographical myth of natural borders. *Political Geography*, 29, 140–147.

Febvre, L. (1973). *Frontière*: The word and the concept. In P. Burke (Ed.), *A new kind of history: From the writings of Lucien Febvre* (trans. K. Folca). London, U.K.: Routledge.

Foucher, M. (1988). *Fronts et frontières. Un tour du monde géopolitique*. Paris, France: Librairie Arthème Fayard.

Foucher, M. (2007). *L'obsession des frontières*. Paris, France: Perrin.

Gelfand, L. E. (1963). *The inquiry: American preparations for peace, 1917–1919*. London, U.K.: Yale University Press.

Goettlich, K. D. (2019). The rise of linear borders in world politics. *European Journal of International Relations*, 25(1), 203–228.

Grovogui, S. N. (1996). *Sovereigns, Quasi Sovereigns, and Africans: Race and Self-Determination in International Law*. Minneapolis, MN: University of Minnesota Press.

Harley, J. B. (1989). Deconstructing the map. *Cartographica*, 26(2), 1–20.

## The Rise of Linear Borders

---

Herbst, J. (1989). The creation and maintenance of national boundaries in Africa. *International Organization*, 43(4), 673-692.

Herz, J. H. (1957). Rise and demise of the territorial state. *World Politics*, 9(4), 473-493.

Holdich, T. (1899). The use of practical geography. *The Geographical Journal*, 13(5), 465-477.

IBC (International Boundary Commission). (2015). **About us**.

Israel, F. L. (Ed.). (1967). *Major peace treaties of modern history, 1648-1967* (Vol. 1). Philadelphia, PA: Chelsea House Publishers.

Jackson, R. H. (1990). *Quasi-states: Sovereignty, international relations, and the third world*. Cambridge, U.K.: Cambridge University Press.

Kadercan, B. (2015). Triangulating territory: A case for pragmatic interaction between political science, political geography, and critical IR. *International Theory*, 71(1), 125-161.

Lalonde, S. (2002). *Determining boundaries in a conflicted world: The role of Utii Posseditis*. Montreal: McGill-Queen's University Press.

Larkins, J. (2010). *From hierarchy to anarchy: Territory and politics before Westphalia*. New York, NY: Palgrave Macmillan.

Miles, E.A. (1957). 'Fifty-four forty or fight'—An American political legend. *Mississippi Valley Historical Review*, 44(2), 291-309.

Morgenthau, H. J. (1960). *Politics among nations: The struggle for power and peace*. New York, NY: Knopf.

Newman, D., & Paasi, A. (1998). Fences and neighbours in the postmodern world: Boundary narratives in political geography. *Progress in Human Geography*, 22(2), 186-207.

Nordman, D. (1998). *Frontières de France: De l'espace au territoire, XVIe-XIXe siècle*. Paris, France: Gallimard.

Nugent, W.V (1914). The geographical results of the Nigeria-Kamerun Boundary Demarcation Commission of 1912-13. *The Geographical Journal*, 43(6), 630-648.

Ohmae, K. (1990). *The borderless world: Power and strategy in the interlinked economy*. New York, NY: Harper Business.

Okonkwo, T. (2017). Maritime boundaries delimitation and dispute resolution in Africa. *Beijing Law Review*, 8, 55-78.

Osiander, A. (2001). Sovereignty, international relations, and the Westphalian myth. *International Organization*, 55(2), 251-287.

## The Rise of Linear Borders

---

Paasi, A. (1996). Territories, boundaries, and consciousness: The changing geographies of the Finnish-Russian boundary. New York, NY: John Wiley.

Parker, N., & Vaughan-Williams, N. (Eds.). (2014). *Critical border studies: Broadening and deepening the 'lines in the sand' agenda*. New York, NY: Routledge.

Philpott, D. (2001). *Revolutions in sovereignty: How ideas shaped modern international Relations*. Princeton, NJ: Princeton University Press.

Pemberton, J. (2002). New worlds for old: The League of Nations in the age of electricity. *Review of International Studies*, 28, 311-336.

Prescott, J. R. V. (1987). *Political boundaries and frontiers*. Winchester, MA: Allen & Unwin.

Rosenberg, J. (1994). *The empire of civil society: A critique of the realist theory of international relations*. London, U.K.: Verso.

Rosenboim, O. (2017). *The emergence of globalism: Visions of world order in Britain and the United States, 1939-1950*. Princeton, NJ: Princeton University Press.

Reus-Smit, C. (1999). *The moral purpose of the state: Culture, social identity, and institutional rationality in international relations*. Princeton, NJ: Princeton University Press.

Ruggie, J. G. (1993). Territoriality and beyond: Problematizing modernity in international relations. *International Organization*, 47(1), 139-174.

Sack, R. D. (1986). *Human territoriality: Its theory and history*. Cambridge, U.K.: Cambridge University Press.

Sahlins, P. (1989). *Boundaries: The making of France and Spain in the Pyrenees*. Berkeley: University of California Press.

Sahlins, P. (1990). Natural frontiers revisited: France's boundaries since the seventeenth century. *The American Historical Review*, 95(5), 1423-1451.

Sandman, A. (2007). Spanish nautical cartography in the Renaissance. In D. Woodward, *The history of cartography: Cartography in the European Renaissance* (Vol. 3, pp. 1095-1142). Chicago, IL: University of Chicago Press.

Sassen, S. (2006). *Territory, authority, rights: From Medieval to global assemblages*. Princeton, NJ: Princeton University Press.

Schwarzenberger, G. (1957). *International law*. London, U.K.: Stevens and Sons.

Semple, E. C. (1907). Geographical boundaries—I. *Bulletin of the American Geographical Society*, 39(7), 385-397.

## The Rise of Linear Borders

---

Simmons, B. A. (2005). Rules over real estate: Trade, territorial conflict, and international borders as institution. *Journal of Conflict Resolution*, 49(6), 823-848.

Spruyt, H. (1994). *The sovereign state and its competitors*. Princeton, NJ: Princeton University Press.

Strandsbjerg, J. (2010). *Territory, globalization and international relations: The cartographic reality of space*. Basingstoke, U.K.: Palgrave Macmillan.

Sylvest, C. (2005). International law in nineteenth-century Britain. *The British Yearbook of International Law*, 75(1), 9-70.

Teschke, B. (2003). *The myth of 1648: Class, geopolitics, and the making of modern international relations*. London, U.K.: Verso.

Thongchai, W. (1994). *Siam mapped: A history of the geo-body of a nation*. Honolulu: University of Hawai'i Press.

Thorpe, F. N. (1909). *The federal and state constitutions, colonial charters, and other organic laws of the states, territories, and colonies now or heretofore forming the United States of America* (Vol. 3). Washington, DC: Government Printing Office.

Tibbetts, G. R. (1992). The beginnings of a cartographic tradition. In J. B. Harley & D. Woodward (Eds.), *The history of cartography: Cartography in the Traditional Islamic and South Asian Societies* (Vol. II). Chicago, IL: University of Chicago Press.

Tilly, C. (1992). *Coercion, capital, and European states, AD 990-1992*. London, U.K.: Blackwell.

Vattel, E. (2008). *The law of nations*. Indianapolis, IN: Liberty Fund.

Vaughan-Williams, N. (2009). *Border politics: The limits of sovereign power*. Edinburgh, U.K.: Edinburgh University Press.

Walters, W. (2002). Mapping Schengenland: Denaturalizing the border. *Environment and Planning D: Society and Space*, 20, 561-580.

Waltz, K. N. (1979). *Theory of international politics*. Reading, MA: Addison-Wesley.

Zacher, M. W. (2001). The territorial integrity norm: International boundaries and the use of force. *International Organization*, 55(2), 215-250.

Zarakol, A. (Ed.). (2017). *Hierarchies in world politics*. Cambridge, U.K.: Cambridge University Press.

Zartman, I. (1965). The politics of boundaries in North and West Africa. *The Journal of Modern African Studies*, 3(2), 155-173.

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