Performing the border: Mapping smuggling and state sovereignty in the Grand Duchy of Lithuania-Prussia borderlands

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ABSTRACT

Scholars of borders and boundary-making have long emphasized that frontiers are not inert lines on maps but historically contingent, socially produced, and continually negotiated spaces. This article revisits the late eighteenth-century frontier between the Grand Duchy of Lithuania (GDL) and Prussia to examine how sovereignty was enacted and contested through customs enforcement and smuggling. We distinguish boundary (a legal framework) from border (lived practices) and situate the case within the gradual European 'linearization' of boundaries. Empirically, we expand the analysis of what was smuggled, by whom, and to what ends—ranging from subsistence-level crossings by peasants to long-distance trading networks funnelling timber to Prussian shipyards. Methodologically, we blend topographical mapping (locating posts, roads, and reported paths) with topological visualization (modelling relations among nodes) to make visible the evolving performance of the border. Two Treasury inspection tours—Jerzy Leparski (1769) and Michał Kleofas Ogiński (1788)—bookend a formative moment of customs reorganization under the GDL Treasury Commission. Read together, they reveal a shift from conspicuous, locally known smuggling paths to more concealed routes as the customs system densified (from roughly two dozen to nearly fifty posts in our study area) and moved closer to the frontier.

Introduction

Borders are often depicted as thin strokes that slice cleanly across space. Yet what turns a graphic line into a workable frontier is the dense accumulation of everyday practices through which states and local actors make and unmake borders. This article examines those practices along the western frontier of the Grand Duchy of Lithuania (GDL) with Prussia in the latter half of the eighteenth century. Our focus is on the interplay of customs enforcement and smuggling. We ask: What actors animated this frontier economy? How did the GDL's administrative reforms reshape the choreography of movement across the boundary? And how can cartographic methods help us trace relations that were both spatially proximate and organizationally far-reaching? To answer these questions, we visualise inspections by Jerzy Leparski

in 1769 and Michał Kleofas Ogiński in 1788 that provide unusually granular views of the GDL—Prussia borderland from the perspective of the Lithuanian Treasury Commission and enable us to reconstruct the evolving process of bordering.[1]

We use these reports to reconstruct networks of relationships—between places, people, and goods—that do not reduce the border to a single line. To do so, we propose a methodological pairing of topographical and topological mapping. The first anchors actors and routes in geographic space using historical and

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[1] Jerzy Leparski, Obwodnica z opisaniem miast, miasteczek y wsi, a pomiędzy te przechodzących, y do nich przychodzących drog, drożek przemytnych, podczas lustracyi Komory Połongowskiey sporządzona roku 1769 miesiąca Junii 28 dnia, Lithuanian State Historical Archives, f. 11, ap. 1, b. 1094; Michał Kleofas Ogiński, Lustracya Komory Połągowskiey przez JW. JM. Pana Michała Oginskiego, wojewodzica Trockiego, kommissarza Skarbu Rzeczypospolitey Wielkiego Xięstwa Litewskiego, do lustrowania Repartycyi Litewskiey delegowanego w roku 1788 m sporządzona, Lithuanian State Historical Archives, f. 11, ap. 1, b. 859; Komora Szczeberska, Lithuanian State Historical Archives, f. 11, ap. 1, b. 1323.

modern cartography to locate settlements, posts, and smuggling paths. The second abstracts from exact coordinates to depict relations as edges connecting nodes: a market town to a Prussian village, a forest to a riverside landing, a guard post to an inn where contraband converged. In this mode, multiple routes from a single Lithuanian origin to different Prussian endpoints can be visualized side by side, illuminating path lengths, clusters, and branching. While topological diagrams may flatten hierarchies (for example, not all edges carry the same volumes or risks), when read against the topographic map and the narrative of the inspectors they highlight patterns that might otherwise remain hidden. Mapping networks draws on work that signals the importance of such visualization in representing the fluid territoriality of pre- and early-modern states.[2]

This article is informed by work in spatial history, which treats spatial visualization and spatial analysis as a mode of historical reasoning. As Richard White has argued, spatial history proceeds through an iterative movement between mapping and interpretation, using visualizations to surface relationships, patterns, and absences that reshape historical questions rather than merely answer them.[3] In this sense, maps suggest new interpretations of archival material by revealing spatial configurations—networks, clusters, gaps, and asymmetries—that are difficult to apprehend through text alone.[4] Our analysis of the GDL—Prussia frontier follows this approach by repeatedly moving between narrative sources, topographic mapping, and topological visualization to understand how bordering was enacted through the everyday practices of customs enforcement and smuggling.

We begin with a brief literature review that synthesizes insights from critical border studies and the geo-historical scholarship on boundary-making. We then reconstruct the eighteenth-century setting of the GDL—Prussia borderland, emphasizing the reforms of the 1760s, the significance of customs revenue and the place of Prussia in the region's political economy. A sources and methods section details how we translated qualitative, sometimes ambiguous, archival descriptions into a mappable corpus. Two empirical sections follow: one centres on the materialities and social worlds of smuggling; the other turns to the performance of state power through the siting, spacing, and scaling of customs posts read through Leparski's and Ogiński's reports and through our visualizations. We close with a discussion of negotiated sovereignty and the methodological implications for mapping lively borders.

Borders, borderlands and bordering

Critical scholarship has transformed how we think about borders, emphasizing bordering as an ongoing process.[5] This paradigm shift has broad implications. Bordering refers to the practices at and beyond physical boundaries that reproduce the state. Borders are continually '(re)produced through modes of affirmation and contestation' and inherently lived.[6] Further, borders are 'not confined to their location in a mappable territory' but are social

constructs performed through overlapping spatialities, and zones of contestation continually redefined by shifting variables, giving rise to 'an infinity of bordering practices.'[7]

A central conceptual tool in this scholarship is the distinction between boundary and border. By boundary we mean the legal—diplomatic framework established by treaties, dynastic settlements, and imperial charters to delineate spheres of authority. By border we mean the lived practices by which such frameworks were implemented, challenged, or transformed across landscapes and institutions. Boundaries are juridical, borders socio-material. In early modern Europe, many boundaries were zonal rather than linear, referencing towns, parishes, or waterways rather than fixed surveyed lines. The eventual 'linearization' of boundaries was an uneven process that required commissions, surveys, and demarcation.[8] Customs regimes—offices, posts, patrols, receipts—were among the most important technologies for making elastic frontiers governable. The GDL—Prussia frontier — the borderland or a zone of interaction between the two states — illustrates this tension vividly, where a centuries-old diplomatic boundary established in 1422 with the Treaty of Melno was translated into a lived border through the material practices of trade, smuggling, and enforcement.[9] The GDL—Prussia case resembles Oscar Martinez's interdependent border category, where social and economic ties facilitate robust cross-border interactions despite formal separation.[10] This interdependence finds echoes elsewhere.[11]

The boundary/border distinction resonates with other cases examined by historical geographers.[12] This matches geographical theories of territoriality that understand territory as a historically contingent and relational strategy of power, produced through mediations among actors, representations, and material practices of demarcation, administration, and enforcement.[13] In the late eighteenth-century GDL—Prussia borderland, customs posts, inspection tours, and accompanying maps translated abstract claims of sovereignty into situated practices that were continually negotiated, resisted, and adapted. This relational and processual

[2] Monica L. Smith, 'Networks, Territories, and the Cartography of Ancient States', *Annals of the Association of American Geographers* 95 (2005) 832—849.

[3] Richard White, 'What is Spatial History', *Spatial History Lab* 1 (2010) 1—6.

[4] *Placing History: How Maps, Spatial Data, and GIS Are Changing Historical Scholarship*, ed. by Anne K. Knowles (Redlands: ESRI Press 2008).

[5] Corey Johnson, Reece Jones, Anssi Paasi, Louise Amoore, Alison Mountz, Mark Salter and Chris Rumford, 'Interventions on Rethinking "the border" in Border Studies', *Political Geography* 30 (2011), 61—69 (p. 67).

[6] *B/Ordering Space*, ed. by Henrik Van Houtum, Olivier Kramsch and Wolfgang Zierhofer (Aldershot: Ashgate 2005) 3; Nick Vaughan Williams, *Border Politics* (Edinburgh: Edinburgh University Press, 2009) p. 1.

[7] Kristine Beurskens and Judith Miggelbrink, 'Sovereignty Contested: Theory and Practice in Borderlands', *Geopolitics*, 22 (2017), 749—756 (p. 753); Thomas Nail, *Theory of the Border* (Oxford: Oxford University Press 2016) p. 6.

[8] Kerry Goettlich, 'The Rise of Linear Borders in World Politics', *European Journal of International Relations* 25:1 (2019) 203—228.

[9] Ladis K. D. Kristof, 'The Nature of Frontiers and Boundaries', *Annals of the Association of American Geographers* 49 (1959) 269—282; Emmanuel Brunet-Jailly, 'Theorizing Borders: An Interdisciplinary Perspective', *Geopolitics*, 10 (2005), 633—649. On the Treaty of Melno see Lina Tamulynas, 'Melno sutartis ir ja nustatyta sienos atkarpa tarp Nemuno ir Baltijos XV—XVIII a.' in *Melno taiko siena nuo Baltijos iki Nemuno. Ženklai, lokalizacija ir archeologiniai tyrimai*, ed. by Lina Tamulynas and Algirdas Skrupskelis (Klaipėda: Všļ Archeologijos centro leidykla, 2023) pp. 10—21.

[10] Oscar J. Martinez, 'The Dynamics of Border Interaction: New Approaches to Border Analysis', in *Global Boundaries. World Boundaries Volume 1*, ed. by Clive H. Schofield (New York: Routledge, 1994) pp. 1—15.

[11] Cynthia L. Sorrensen, 'A History of Transboundary Storm Waterflows: Flooding, Tunnels, and the Spatial Incongruity of the US-Mexico border', *Journal of Historical Geography* 38 (2012) 447—457; Joshua Savala, 'An Axis, not a Line of Division: Cooperative Planning and Development on the US-Mexico border, 1960s', *Journal of Historical Geography* 84 (2024) 61—71.

[12] Catherine Nash, Lorraine Dennis and Brian Graham, 'Putting the Border in Place: Customs Regulation in the Making of the Irish Border, 1921—1945', *Journal of Historical Geography* 36 (2010) 421—431; Hélène Blais, 'An Intra-Imperial Conflict: The Mapping of the Border between Algeria and Tunisia, 1881—1914', *Journal of Historical Geography* 37 (2011) 178—190; Moran Zaga, 'Framing the Trucial Coast's tribes: Shifting Notions of Border and Imperial Influence before the United Arab Emirates', *Journal of Historical Geography* 71 (2021) 36—51.

[13] Robert D. Sack, *Human Territoriality: Its Theory and History* (Cambridge: Cambridge University Press, 1986); Claude Raffestin, *Space, Territory, and Territoriality* (Lanham: Rowman & Littlefield, 2012); Stuart Elden, *The Birth of Territory*, (Chicago, University of Chicago Press, 2013).

understanding of territoriality also resonates with John Agnew's critique of the 'territorial trap,' which cautions against treating state territory as a fixed, bounded container of power.[14] Rather than assuming sovereignty to be spatially uniform and internally coherent, Agnew emphasizes its uneven, historically situated enactment—an insight that helps illuminate how authority along the GDL—Prussia frontier was exercised selectively through customs infrastructure and inspections, and continually reshaped by local practices of movement and exchange.

Smuggling is a particularly vivid human activity where the difference between boundary and border becomes clear. Smuggling was not merely illicit trafficking in forbidden goods but often the circumvention of fiscal regimes designed to extract revenue from otherwise licit commodities. In the eighteenth-century GDL—Prussia borderland, contraband timber, textiles, iron, and salt were not illegal in themselves; what made them illicit was their movement outside customs channels. Smuggling thus illuminates the intersection of state fiscal logic with the social and economic logics of border communities. Small, portable goods such as textiles or tools could be concealed and moved opportunistically, while bulky goods like timber required coordination, storage, and infrastructure, from mills to river flotillas. The varied materialities of goods shaped enforcement strategies and smugglers' tactics alike. Smuggling drove the expansion of enforcement apparatuses, forcing states to adapt their fiscal regimes and enforcement practices.[15] The GDL—Prussia frontier exemplifies this feedback loop: smugglers adapted to patrols and posts, prompting new inspections and tighter surveillance, which in turn generated new evasions.

The dynamic nature of the border has prompted scholars to view these as performative sites. Johnson and Jones describe borders as 'enacted, materialized, and performed,' with Mark Salter identifying three types of border performances: formal, asserting sovereignty; practical, enforcing admissions and exclusions; and popular, in which communities debate and reinterpret border meanings.[16] At the GDL—Prussia frontier, formal performances—such as those of Leparski in 1769 and Ogiński in 1788—appeared in the presence of guards and the paperwork of customs clerks; practical performances in inspections, bribes, and evasions; and popular performances in local knowledge about which roads were safe and which posts vigilant. These performances scattered the border across space and time, generating feedback loops in which enforcement reshaped smuggling practices, which in turn demanded new enforcement. Comparative cases by historical geographers show how border performances are simultaneously material, symbolic, and relational, continually redefining the meaning of the boundary line.[17]

Taken together, this literature urges us to move beyond rigid geographic representations of borders. Alison Mountz, who describes borders as 'always in a state of becoming' shaped by shifting forces, urges geographers to find innovative mapping techniques to reflect this dynamism.[18] We follow this call by combining topographic and topological mapping to reconstruct the evolving eighteenth-century GDL—Prussia frontier. Our focus is on how customs enforcement and smuggling intersected to produce a border that was always in motion: a lived frontier where the fiscal-military state confronted, adapted to, and was shaped by the practices of local actors.

Smuggling along the GDL-Prussia borderlands: a brief history

The origins of the Lithuanian—Prussian border can be traced back to the thirteenth century, when the Teutonic Order established its foothold in Prussia and unilaterally defined the frontier with Lithuania.[19] Early efforts at boundary making reflected the instability of the region: the first treaties in the fourteenth century created temporary borders, with designated 'peace strips' to allow movement of goods and people. Yet constant warfare meant that much of the borderland remained an uninhabited wasteland.[20] The border shifted dramatically during the late fourteenth and early fifteenth centuries, culminating in the decisive Battle of Grunwald in 1410, when the combined Lithuanian and Polish forces defeated the Teutonic Order. After more than a decade of subsequent negotiations and military pressure, the Treaty of Melno in 1422 stabilized the frontier between the Teutonic Order, Lithuania, and Poland. This treaty provided a framework that endured for centuries, with the border following natural features such as the rivers Šventoji, Rusnė, and especially the Nemunas (Memel).[21] However, the period up to the Third Partition of the Polish-Lithuanian Commonwealth (1795) was marked by constant territorial disputes regarding minor segments of the boundary as well as continuous efforts to correct it due to the growing extent of colonization in the theretofore sparsely inhabited borderland region.[22]

The Treaty of Melno also marked the birth of the Lithuanian-Prussian borderland as a distinct social and economic space. It opened the way for integration into the structures of both states and churches, while also inviting new contestations. By the fifteenth and sixteenth centuries, the end of large-scale military conflict, Prussia's new role as a vassal state of Poland-Lithuania, colonization of the sparsely settled frontier, and Lithuania's emergence as an exporter of grain, wax, wood, and flax to European markets all enhanced the importance of this borderland. Leading to major ports such as Königsberg (Kaliningrad), Danzig (Gdańsk) and Memel (Klaipėda), the Nemunas river became the chief artery of this exchange.[23] In Martinez's terms, the borderland shifted from an 'alienated' to a 'coexistent' zone, where boundaries did not isolate communities but facilitated their interaction.[24]

By the eighteenth century, profound changes had reshaped the Lithuanian—Prussian frontier. Influenced by Enlightenment ideals,

[14] John Agnew, 'The Territorial Trap: The Geographical Assumptions of International Relations Theory', *Review of International Political Economy* 1:1 (1994) 53—80.

[15] Max Gallien and Florian Weigand, 'Studying Smuggling', in *The Routledge Handbook of Smuggling*, ed. by Max Gallien and Florian Weigand (London: Routledge, 2022) pp. 1—15.

[16] Johnson et al., 'Interventions on Rethinking "the border"', pp. 62; 66—67.

[17] Julie Vullnetari, '"Dancing in the Mouth of the Wolf": Constructing the Border through Everyday Life in Socialist Albania', *Journal of Historical Geography* 63 (2019) 82—93; Nash et al., 'Putting the Border in Place'; Chris Pearson, 'Canines and Contraband: Dogs, Nonhuman Agency and the Making of the Franco-Belgian Border during the French Third Republic', *Journal of Historical Geography* 54 (2016) 50—62.

[18] Johnson et al., 'Interventions on Rethinking "the border"', p. 65.

[19] Tomas Čelkis, *Lietuvos Didžiosios Kunigaikštystės teritorija: sienų samprata ir delimitaciniai procesai XIV—XVI amžiuje* (Vilnius: Vilniaus universiteto leidykla, 2014), pp. 148—149.

[20] Čelkis, *Lietuvos Didžiosios Kunigaikštystės teritorija*, pp. 152—153.

[21] Tamulynas, 'Melno sutartis'; Čelkis, *Lietuvos Didžiosios Kunigaikštystės teritorija*, pp. 160—161.

[22] Tamulynas, 'Melno sutartis', 16—17; Čelkis, *Lietuvos Didžiosios Kunigaikštystės teritorija*, pp. 163—175.

[23] Juratė Kiaupienė, 'The Baltic Sea World in the Early Modern Period. A Specific Feature of Economic Development in the Grand Duchy of Lithuania', in *Zones of Fracture in Modern Europe: The Baltic Countries, the Balkans, and Northern Italy*, ed. by Almut Bues (Wiesbaden: Harrasowitz, 2005) pp. 166—176; Michael North, 'The Baltic Sea' in David Armitage, Alison Bashford and Sujit Sivasundaram (eds.), *Oceanic Histories*, (Cambridge: Cambridge University Press, 2017) pp. 209—233.

[24] Martinez, 'The Dynamics of Border Interaction', p. 6.

the Polish-Lithuanian Commonwealth sought to rationalize border control and maximize revenue from customs duties.[25] In the 1760s, reformers introduced a centralized state customs system——the Treasury Commission——to replace the older arrangement in which both state and nobility collected tolls.[26] Šmigelskytė-Stukienė et al. describe this restructuring as a 'gradual process of transition to bureaucratic structures organized under modern principles.'[27] Under this reorganized system, officers were assigned specific duties, creating a complex customs hierarchy to enforce economic and political controls.[28] These reforms mirrored broader European developments, such as the reorganization of customs in the Holy Roman Empire and reflected both internal and external pressures.[29] The Treasury Commission was meant to prevent the flow of contraband through the porous border, stimulated among other factors by the economic growth of Klaipėda and the significance of Prussia as the GDL's main trading partner.[30] Inspections of border control infrastructure revealed that even small-scale contraband was of prime concern to Treasury officers who tried to suppress illegal trade by establishing new customs posts, hiring additional officers, or monitoring (in some cases, even destroying) clandestine smuggling paths through the dense forests that covered a considerable part of the borderland. The scale of contraband through the Lithuanian-Prussian border also affected Prussia's economy and forced its authorities to implement additional border security measures.[31]

The Lithuanian borderland that developed after the stabilization of the border supported a mosaic of towns, villages, noble estates, and church holdings.[32] Larger towns on the Lithuanian side were quite far away, however the port of Klaipėda as well as some larger Prussian towns like Šilutė were comparatively easy for the borderlanders to reach by foot or by cart. The accessibility of the Nemunas river facilitated both legitimate trade and smuggling. The population of the Lithuanian borderland was diverse, consisting of peasants, petty nobles, and Jewish and Christian townspeople. Customs records from Palanga reveal that most smugglers detained were local peasants and Jews engaged in small-scale activities.[33] This suggests, as Anne Montenach has argued about another eighteenth-century border, that such economic behavior could be seen as either a 'simple survival strategy' or a form of small-scale 'capitalist enterprise'.[34]

By the eighteenth century the frontier had become a space where these tensions played out in material form. Customs posts, patrols, and networks of informants embodied state authority, while clandestine paths, bribes, and small-scale smuggling represented the limits of that authority. Seasonal rhythms shaped this economy—timber floated in spring, markets peaked in summer, and ice in winter created both obstacles and opportunities. The frontier was also shaped by broader geopolitical dynamics. Prussia's growing fiscal-military state exerted increasing pressure on its Lithuanian neighbor, while the Commonwealth struggled with deficits, internal factionalism, and the demands of reform. Customs reforms thus represented both an effort to modernize administration and a defensive response to external competition.

The frontier was never a fixed line. It was a lived space, shaped by rivers and forests, villages and towns, goods and seasons. It was reproduced through practice as much as through treaties or maps. For the state, it was a challenge of administration and revenue. For borderland communities, it was a landscape of both opportunity and constraint. In this sense, the Lithuanian—Prussian frontier illustrates the broader paradox of borders: enduring yet mutable, political constructs sustained and contested through the everyday lives of those who lived along them.

Sources and methods

Against this backdrop, two inspections offer snapshots of the frontier's evolving administration. Our main primary sources are the 1769 inspection by Jerzy Leparski and the 1788 inspection by Michał Kleofas Ogiński, conserved at the Lithuanian State Historical Archives, that represent two uniquely detailed reports on smuggling and customs infrastructure on the GDL-Prussian border that enable comparative analysis.[35] To analyse these reports, the handwritten documents were first digitized and then translated from Old Polish to English for analysis. Each report combines itinerary, assessment, and recommendation. Both refer to maps. Leparski's map is lost, but its existence and features can be inferred from the text of his report, which mentions the marking of sanctioned roads, smuggling paths, and salient infrastructure such as bridges, taverns, and mills.[36] Ogiński's inspection produced several large-scale maps, however only a poor-quality published reproduction of the overview map survives.[37] Despite this, the reproduction offers a window into Ogiński's understanding of the region: his map outlines the main population centres, trade routes, and checkpoints, alongside the physical border separating the GDL from Prussia. These maps provided the Treasury with detailed visual accounts of the customs network's geography, crucial for both administering and expanding state control.

[25] Ramunė Šmigelskytė-Stukienė, Eduardas Brusokas, Liudas Glemža, Robertas Jurgaitis, and Valdas Rakutis, *Modernios administracijos tapsmas Lietuvoje: valstybės institucijų raida 1764–1794 metais* (Vilnius: Lietuvos istorijos institutas, 2014); Irina Kiturko, 'Skarbovaia komissiia VKL i reorganizatsiia tamozhennoi sluzhby v 1765–1772 gg.', *Historychna-arkhealagichny zbornik* 29 (2014) 129–139; Stanislaw Kościalkowski, *Antoni Tyzenhauz: Podskarbi Nadworny Litewski*, vol. 2 (Wilno: Uniwersytet Stefana Batorego, 1971).

[26] Martynas Jakulis, Aivaras Poška, Andrej Ryčkov, Alberto Giordano, and Jurgita Verbickienė, 'The Creation of the Border Control Infrastructure at the Border of the Grand Duchy of Lithuania and Prussia in the Second Half of the Eighteenth Century', *Jahrbücher für Geschichte Osteuropas* 72 (2024) 219–250 (p. 220).

[27] Šmigelskytė-Stukienė et al., *Modernios administracijos tapsmas Lietuvoje*, p. 671.

[28] Šmigelskytė-Stukienė et al., *Modernios administracijos tapsmas Lietuvoje*.

[29] Luca Scholz, *Borders and Freedom of Movement in the Holy Roman Empire* (Oxford: Oxford University Press, 2020) p. 10.

[30] Rolf Straubel, *Die Handelsstädte Königsberg und Memel in friderizianischer Zeit. Ein Beitrag zur Geschichte des ost-und gesamtpreußischen „Commerciums" sowie seiner sozialen Träger (1763–1806/15).* (Berlin: Berliner Wissenschafts-Verlag, 2003); Liudas Truska and Rimantas Jasas, Vneshniaia torgovlia Velikogo Kniazhestva Litovskogo v poslednie gody ego sushchestvovaniia (1785–1792). *Lietuvos TSR Mokslų akademijos darbai: A serija* 32 (1970), 23–53; Darius Žiemelis, XVI–XVIII a. Abiejų Tautų Respublikos užsienio prekybos struktūra bei mastas: LDK atvejis (II). *Lituanistica* 57 (2011), 365–385.

[31] *Prūsijos valdžios gromatos, pagraudenimai ir apsakymai lietuviams valstiečiams,* ed. by Povilas Pakarklis(Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla, 1960).

[32] Elmantas Meilus, *Žemaitijos kunigaikštystės miesteliai XVII a. II pusėje – XVIII a.: raida, gyventojai, amatai, prekyba* (Vilnius: Lietuvos istorijos instituto leidykla, 1997).

[33] Martynas Jakulis, Alberto Giordano, Aivaras Poška, Andrej Ryčkov, and Jurgita Verbickienė, 'Smuggling in the Grand Duchy of Lithuania–Kingdom of Prussia Borderland at the End of the Eighteenth century: The Case of Palanga Customs', *Journal of Baltic Studies* 56 (2025) 165–181.

[34] Anne Montenach, Conflict, Territory and the Frontier Economy: Smuggling in the Alps of Dauphiné During the 18th Century, *Journal of Alpine Research* 104 (2016) 1–14 (p. 1).

[35] Leparski, Obwodnica; Ogiński, Lustracya.

[36] Leparski, Obwodnica.

[37] Ramunė Šmigelskytė-Stukienė, *Michał Kleofas Ogiński: Politician, Diplomat and Minister (1786–1794)* (Vilnius: Petro ofsetas, 2015) p. 72.

In 1769, Jerzy Leparski traversed the borderland from south to north, noting posts, paths, and places where smuggling converged. He recommended new sites for guard posts, often conceived as a coordinated ensemble rather than as isolated stations, and treated forests as sources of contraband timber and inns as nodal points where people and goods intermingled. In 1788, Michał Kleofas Ogiński undertook a comprehensive inspection of customs structures. His perspective was more institutional. He evaluated the performance of officers, the adequacy of recordkeeping, the placement and condition of posts, and the audit trails that linked receipts to remittances. He observed that the number of posts had expanded significantly—approximately doubling in the corridor from Jurbarkas to Palanga—and that several posts had been moved closer to the frontier. He still noted smuggling at many points, however, and instructed superintendents to station mounted guards or to dig up well-known paths near certain inns.[38] The impression is of a system that had densified and professionalized but that confronted an equally adaptive smuggling ecology.

The contrast between the two inspections is not merely temporal but scalar. Leparski wrote from the peripatetic vantage of a traveler attentive to micro-geographies—the exact lay of a road, the visibility of a path from a *gościniec* (public road), the relation between a head-post and a subordinate station.[39] Ogiński's map (surviving in reproduction) pulled back to an overview, arraying districts in a schematic that stresses networks of reporting and accountability.[40] Read together, they expose how bordering oscillated between site-specific improvisation and bureaucratic standardization. Both recognize the frontier as lively, not because they espoused critical theory *avant la lettre*, but because their jobs required them to notice where the apparatus worked and where it frayed.

The task of contemporary mapping the GDL-Prussia border from these historical reports brought with it considerable challenges. Many of the places referenced no longer exist or have changed names, and, in some cases, the same toponym referred to different towns or villages. Attempting to reconstruct these eighteenth-century landscapes, we relied on a combination of historical and contemporary cartographic resources. High-resolution, digitized versions of topographic maps from 1796 to 1802 and 1893 served as primary sources.[41] Additionally, we used the publicly accessible, contemporary ORT10LT map data.[42] When the exact identification of places proved elusive, the reports themselves became a critical guide. They often detailed the distance between customs structures, allowing us to make educated decisions based on the sequential order of locations provided. In instances where multiple settlements shared a name, we depended on the internal logic of these sources, aligning reported details with known geographical information. To maintain clarity, all mapped locations are presented using present-day toponyms corresponding to where the historical customs system was operational.

Mapping smuggling paths introduced a unique set of complications, primarily due to the lack of precise information about their exact routes. All that we could ascertain with certainty was that these paths existed, though not exactly where they ran

through the borderlands. In the absence of specific coordinates, we represented smuggling paths as straight lines connecting the locations cited in the reports. However, some locations were only vaguely described. For instance, certain paths led to 'Prussian villages' across the border; on the GDL side, corresponding paths originated from unspecified Lithuanian locations. In these cases, we marked the paths' approximate endpoints near the border, relying on historians' knowledge of the region during that period. This practice of cartographic generalization is a common, often necessary, approach when mapping historical sources. The specific placement of these features on the ground was not always determinable—after all, Prussia as a generalized term provides no specific reference point and complicates accurate mapping. Furthermore, smuggling paths are visualized as lines linking two points even though this was undoubtedly not always the case. For instance, in our GIS representation, the smuggling routes originating from the Jurbarkas forest and extending to Prussian villages, as well as those from the Vainutas forest to Šilutė, appear as two distinct lines connecting specific points. These routes linked regions rather than specific points, but for mapping purposes we simplified these connections to one line between designated locations.

This method allowed us to illustrate a spatial relationship between geographical features in an abstracted, simplified form. When only the presence of a spatial connection was significant—such as indicating a smuggling path between two locations—the map allowed for this relationship to be represented topologically, as we illustrate in Fig. 5. A related challenge involved accurately pinpointing the locations of customs infrastructures mentioned in the reports, which the inspectors typically identified using the nearest town or village, with their actual location unknown. To address this, we used the coordinates of these nearby settlements, effectively assigning the customs posts to the locations of towns and villages named by Leparski and Ogiński. The complexities we faced in mapping historical data reflect the challenges of translating qualitative, often incomplete, historical records into quantitative, positionally accurate representations. Topographical maps situate features with geographic precision but risk obscuring diffuse relational structures. Topological diagrams, by contrast, foreground connections and clustering, at the cost of geographic fidelity. Reading both against inspectors' reports allows us to visualize not only where posts and paths were located, but also how they connected settlements, forests, and markets.

We are mindful of the limits of our corpus. The reports reflect the perspectives and concerns of GDL's Treasury Commission officials and do not capture the Prussian administrative side except as inferred from destinations and complaints. The maps have been filtered through loss and reproduction. Our reconstructions are therefore propositional: they aim to make patterns visible and testable rather than to claim definitive spatial truth. This stance aligns with the broader methodological claim of the article: that mapping is an interpretive act that can be designed to surface the relational features of borderlands that textual narrative alone cannot easily hold together. This stance also aligns with scholarship in the spatial humanities and historical GIS, which emphasizes the interpretive character of spatial data and the epistemic consequences of modelling historical space.[43]

[38] Ogiński, Lustracya.

[39] Leparski, Obwodnica.

[40] Šmigelskytė-Stukienė, *Michał Kleofas Ogiński*, p. 72.

[41] Friedrich Leopold von Schroetter, *Karte von Ost-Preussen nebst Preussisch Litthauen und West-Preussen nebst dem Netzdistrict* (Berlin: S. Schop u. Comp., 1812); Reichsamt für Landesaufnahme, *Karte des Deutschen Reiches* (Berlin 1893).

[42] Ministry of Agriculture of the Republic of Lithuania, *ORT10LT Digital raster orthophotographic map of the territory of the Republic of Lithuania* (Vilnius: GIS – Centras, 2012–2013).

[43] *The Spatial Humanities: GIS and the Future of Humanities Scholarship*, ed. David J. Bodenhamer, John Corrigan and Trevor M. Harris (Bloomington: Indiana University Press 2010); *The Geospatial Humanities: Transdisciplinary Opportunities*, ed. by Alberto Giordano, Shih-Lung Shaw and Diana Sinton (Proceedings of the 2019 UCGIS Symposium, International Journal of the Humanities and Arts Computing (IJHAC), 14-2. Edinburgh: Edinburgh University Press, 2020).

Seeing the border differently

The reports we analyse are not merely records of, but also tools of, statecraft—mechanisms through which the state performed its border and thus need to be read carefully. The very act of commissioning these reports exemplifies one of the GDL's 'bordering practices', which van Houtom et al. describe as the 'large ensemble of connected practices, ranging from printed bodies of laws and maps to corporeal inscriptions and the surveillance of boundaries on the landscape' that 'reproduce' and keep 'alive' a nation state's border.[44] In the eighteenth century, these practices were embodied by officials like Leparski and Ogiński, who traversed the borderlands and recorded their findings for the state. By focusing on customs enforcement as an economic function, these inspectors aligned with Nail's historical schema of bordering, which he describes as developing across four domains—territorial, political, juridical, and economic—each with dominant 'literal, material social technologies that produce social division': variously 'the fence, the wall, the cell, and the checkpoint'.[45] In this case, the GDL-Prussia border's customs network illustrates the 'checkpoint regime', an economic mechanism that Nail notes emerged in the eighteenth century as a means of controlling the mobility of people and goods.[46] This network of checkpoints, guard posts, and customs stations forms the backbone of Leparski's and Ogiński's reports, revealing how the inspectors envisioned future flows of smuggling and outlined specific measures to curb them.

From the perspective of historical cartography, the maps associated with Leparski's and Ogiński's inspections must be understood not as neutral depictions of territory but as instruments of governance embedded in specific administrative projects. Scholars of cartographic history and critical cartography have long emphasized that maps do not simply represent space; they participate in its production by privileging certain relations, obscuring others, and naturalizing particular territorial imaginaries.[47] Read in this light, the inspectors' cartographic practices—whether preserved, lost, or reconstructed—formed part of the Treasury Commission's effort to render the border legible, governable, and fiscally productive. Our own mapping deliberately foregrounds this interpretive dimension by treating historical maps and contemporary visualizations alike as situated acts of knowledge-making rather than transparent windows onto the past.

However, in the two reports, we see two distinct perspectives on border enforcement that in part reflect the maturing of the system. Leparski's 1769 report, written shortly after the formation of the new customs system, focused on the infrastructure needed to control smuggling routes and develop the customs network.[48] His approach adopted 'discourses of smuggling and porosity', viewing the border as penetrated by a series of paths that needed to be guarded.[49] In contrast, Ogiński's 1788 report evaluated the customs system's existing framework, focusing on organization, record-keeping, and staff professionalism.[50] Borrowing from Gregor Dobler, we may say that Ogiński adopts a bird's-eye view of the region, while Leparski's perspective is far more localized, recording smuggling as a site-specific activity.[51] In other words, the two reports observe and characterize customs organization and smuggling at different scales of analysis.

An examination of the word frequencies in the two reports confirms this differences in focus. 'Marked' and 'map' figure prominently in Leparski's 1769 report, followed by 'mile,' 'road,' 'village,' and 'guard'.[52] The first two words attest to the importance of the now lost map that accompanied the text of the report and is indicative of how Leparski worked. The third, fourth, fifth, and sixth words characterize the border as a region composed of villages accurately located and mapped where the state is present with its customs posts and the guards that people them. Central to his narrative is also of course smuggling. Ogiński's 1788 report focuses on the GDL side of the border and the state's customs infrastructures for border control, as demonstrated by the prominence of the terms 'customs,' 'guard,' 'post,' and 'sub' (as in 'sub-guard' and 'sub-customs').[53] The economic aspect, implicit in 1769, comes to the forefront of the narrative in 1788, in which the word 'duties' and 'collected' appear prominently in reference to the collection of fees for the transport of goods across the border. As Ogiński explained at the start of his survey, he offered 'propositions on how to improve the order and increase the income of the Treasury'.[54] Border infrastructure was not intended to keep goods from moving into and out of the GDL, but rather to ensure that customs duties were extracted during these cross-border flows. The differences between the two reports indicate a shift in the state's priorities over two decades. Whereas Leparski viewed the borderland as a lived landscape, composed of villages and routes marked by physical landmarks, Ogiński focused on the network of customs infrastructure.

Both Leparski's and Ogiński's reports illustrate a particular statist view of smuggling, which Gallien and Weigand argue can often frame smuggling in ways that uphold the state's interests.[55] However, the reports also reveal the complexities of border enforcement and reflect the inspectors' awareness of the border's lived reality. By visualising smuggling paths and proposing ways to disrupt them, Leparski and Ogiński demonstrate the state's efforts to establish a border defined not merely by territory but by the enforcement practices that shaped it. These reports offer a glimpse into a world where the state sought to counteract the unmaking of the border by smugglers and develop a sophisticated system of checkpoints to keep these economic activities in check. Ultimately, Leparski's and Ogiński's accounts underscore the delicate balance of sovereignty within the borderlands. Their recommendations—whether to establish new guard posts or reorganize customs networks—highlight an ongoing negotiation between the ideals of state control and the reality of a porous borderland. The eighteenth-century GDL-Prussia border emerges as a space of constant adaptation and performance, shaped by state practices and the responses of those navigating its complex, shifting geographies.

Performing the border: patterns of smuggling

In his 1769 report, Leparski meticulously mapped each location he visited (Fig. 1), noting guard posts as well as the entry and exit

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[44] Van Houtom et al., *B/Ordering Space*, p. 3.

[45] Nail, *Theory of the Border*, p. 110.

[46] Nail, *Theory of the Border*, p. 110.

[47] John B. Harley, 'Deconstructing the Map' *Cartographica* 26-2 (1989) 1–20; Matthew H. Edney, *Cartography: The Ideal and Its History* (Chicago: University of Chicago Press, 2019); Jeremy W. Crampton, John W. Krygier, 'An Introduction to Critical Cartography', *ACME: An International Journal for Critical Geographies* 4-1 (2006) 11–33.

[48] Leparski, Obwodnica.

[49] Gallien and Weigand, 'Studying Smuggling', p. 3.

[50] Ogiński, Lustracya.

[51] Gregor Dobler, 'Localising Smuggling', in *The Routledge Handbook of Smuggling*, ed. by Max Gallien and Florian Weigand (London: Routledge, 2022), pp. 19–29.

[52] Leparski, Obwodnica.

[53] Ogiński, Lustracya.

[54] Ogiński, Lustracya.

[55] Gallien and Weigand, 'Studying Smuggling', 3.

points of smuggling paths, thereby constructing the border region spatially within his narrative. His perspective reveals two key elements. First, he saw the border not only as a dividing line——referred to in Polish as a *granica*—but also as a broader band he labelled a 'borderland' (*pogranicze*), consisting of Lithuanian and Prussian villages on either side of the line.[56] Typically close to the border, these communities in regions like the northern Palanga customs area, sometimes stretched farther out along riverbanks. Secondly, Leparski extended this borderland concept beyond immediate proximity to the border, mentioning market towns within both Lithuania and Prussia connected by longer smuggling paths that crossed the border. In doing so, he visualized the borderland as both a narrow strip and a network of routes extending toward urban centres.

distributed but clustered in specific areas that suggest smuggling's distinct spatial distribution. One type of smuggling involved local crossings by peasants near the GDL-Prussia border, visible on the map as paths linking one or two nearby locations. The other was more extensive, connecting urban areas in Lithuania to sites in Prussia. For instance, in the central Jurbarkas customs region, Leparski urged the establishment of a head-guard post at Girininkai due to 'many smuggling paths, especially from Kražiai, Raseiniai, and many other locations'.[57] These locations, about 60 km from the border, indicate a pattern of long-distance smuggling. In such cases, local smuggling often merged with trans-regional or even trans-national flows. For example, in the Jurbarkas forest, local Prussian smugglers regularly crossed into the GDL to cut trees and smuggle them back across the border.
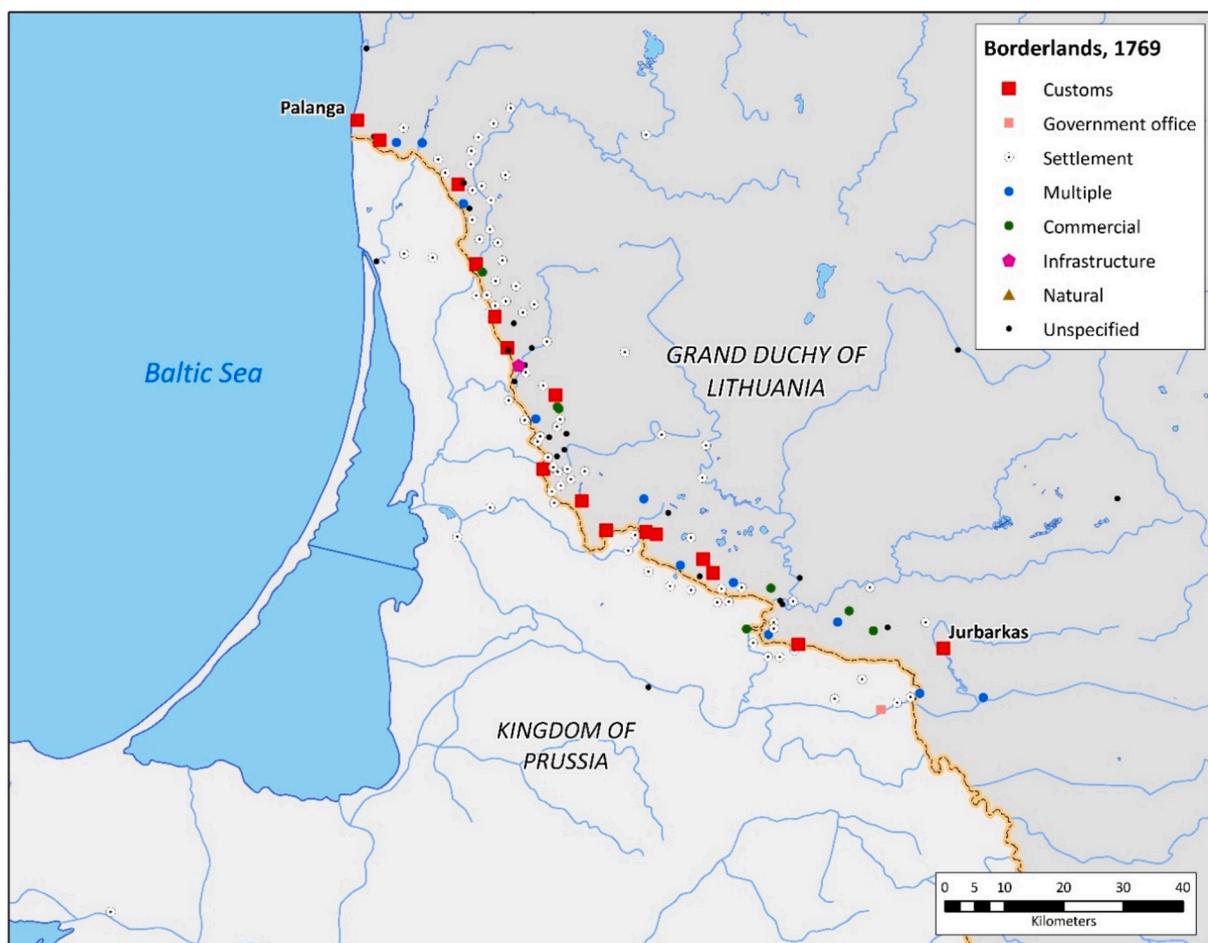

Fig. 1. Borderlands, 1769. Map by authors.

These spatial patterns in Leparski's report correspond to two modes of smuggling, each creating different forms of cross-border activity and territorial influence. Fig. 2 maps all smuggling paths identified by Leparski as he moved northward from Jurbarkas to Palanga in 1769. Here, two observations emerge. First, the smuggling paths intersect the border at points both near and far from its line, reinforcing the dual nature of the border space described in Fig. 1. Second, the paths are not uniformly

These logs, intended not for firewood but for building and ship construction, were floated down the Nemunas River to Königsberg (now Kaliningrad) and other Prussian cities far from the border. This type of smuggling required coordination, cross-border connections, and capital, setting it apart from the subsistence-level smuggling that occurred elsewhere along the border.

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[56] Leparski, Obwodnica.
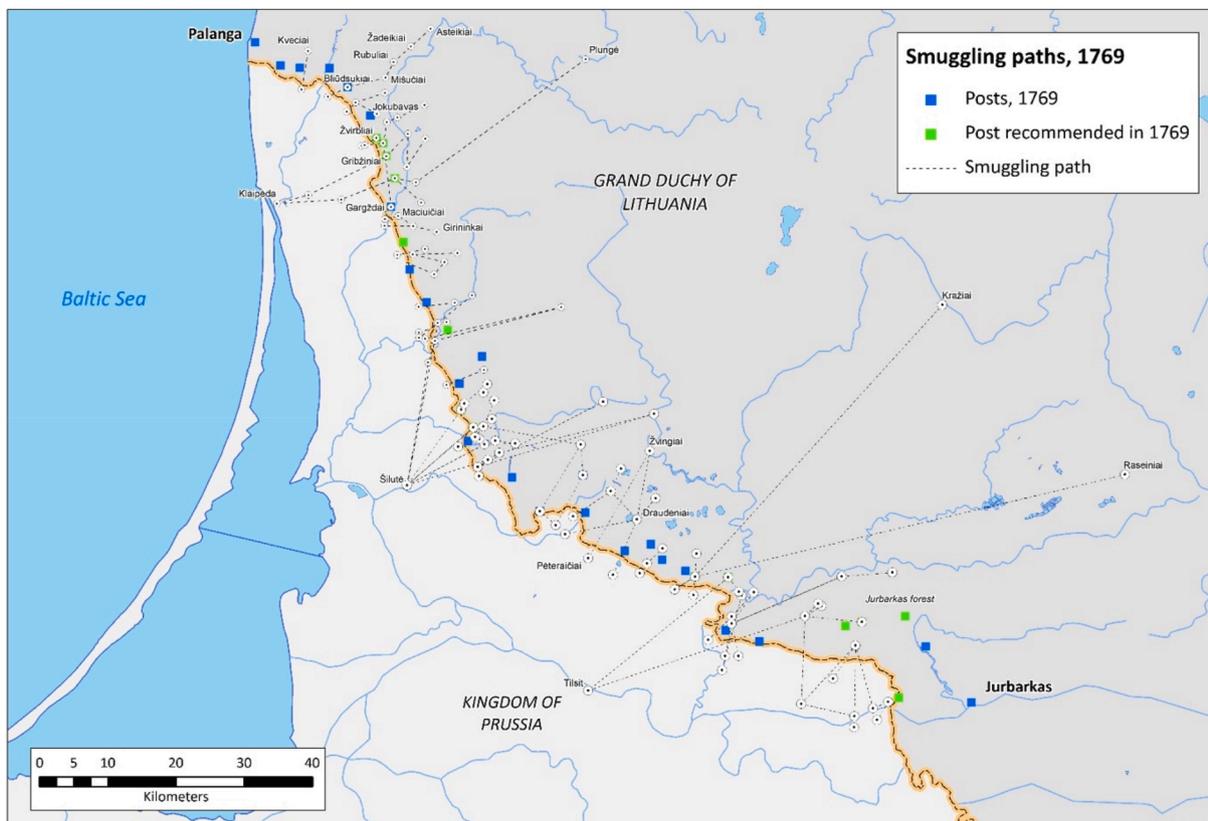
[57] Leparski, Obwodnica.

Fig. 2. Existing and recommended posts, and smuggling paths, 1769. (The locations identified are also mentioned in the text.) Map by authors.

The different spatial scales of smuggling reflect the diversity within smuggling networks. Local, regional, and transnational smuggling often overlapped on the same routes, with actors from different places and backgrounds using them in various ways. For instance, Leparski described 'a smuggling path leading from the village [of] Draudeniai … and the town [of] Žvingiai … ' He noted that 'this path is used by smugglers from the village [of] Draudeniai and the town [of] Žvingiai, and especially by other citizens who live above these locations; this path leads primarily to the Prussian village called Pėteraičiai which lies one eighth of a mile from the border'.[58] Leparski's account reveals that this single route served multiple groups, including Draudeniai's villagers, Žvingiai's townspeople, and residents from farther afield. While Draudeniai was a typical peasant village, Žvingiai had been granted market town status in 1744, with an inventory from 1699 listing its bridges, market squares, and accommodations for travellers, which speaks to its established infrastructure.[59] The diversity of smugglers using these paths points to a shared route serving distinct needs. From peasant subsistence smuggling to larger-scale illicit trade, the same paths enabled smuggling at varying distances and scales, a pattern not unique to this borderland or these times. The layered smuggling paths in Leparski's report reflect the distinctions drawn by Gallien and Weigand between 'bootleggers' and 'wholesale smugglers' or Dobler's

classifications of smuggling as 'green' (small-scale, on foot or bicycle), 'grey' (transported by trucks), and 'blue' (long-distance transport by air or sea).[60]

As shown in Fig. 2, smuggling paths concentrated in certain sections of the GDL-Prussia border. The most notable cluster identified by Leparski led to Šilutė, a Prussian market town situated halfway between Palanga and Jurbarkas. GDL smugglers frequented Šilutė for goods like iron tools and textiles, which were costlier within the GDL. These items generally remained close to the border, often sold locally within nearby GDL villages. Fig. 2 also suggests how Leparski's observations of smuggling paths bisecting official routes reveal what Dorfman et al. call the 'material outcome of border control,' shaped by post-1764 reforms that had reconfigured the customs infrastructure along the border.[61] Guard posts did not eliminate smuggling; they redirected it, prompting Leparski to recommend additional guard posts in strategic locations to close gaps in the customs network. For example, during his inspection of a 16-km stretch between Palanga and Bliūdsukiai, Leparski documented several smuggling paths between Jokūbavas and Gargždai and proposed establishing additional posts.[62] The map of Ogiński's 1788 inspection (Fig. 3) confirms that this recommendation was implemented, with posts added in Žvirbliai, Vaiteliai, Gribžiniai, and Kvietiniai. Despite these efforts, smuggling paths persisted in the area.

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[58] Leparski, Obwodnica.

[59] Meilus, *Žemaitijos kunigaikštystės*, pp.119, 167.

[60] Gallien and Weigand, 'Studying Smuggling', p. 4; Dobler, 'Localising Smuggling', p. 25.

[61] Adriana Dorfman, Arthur Borba Colen Franca and Rafael Francisco França, 'Political Commodities and Sovereignty Management: Cigarette Smuggling across Brazil's Southern Borders', *Geopolitics* 22 (2017), 863—886 (p. 879).
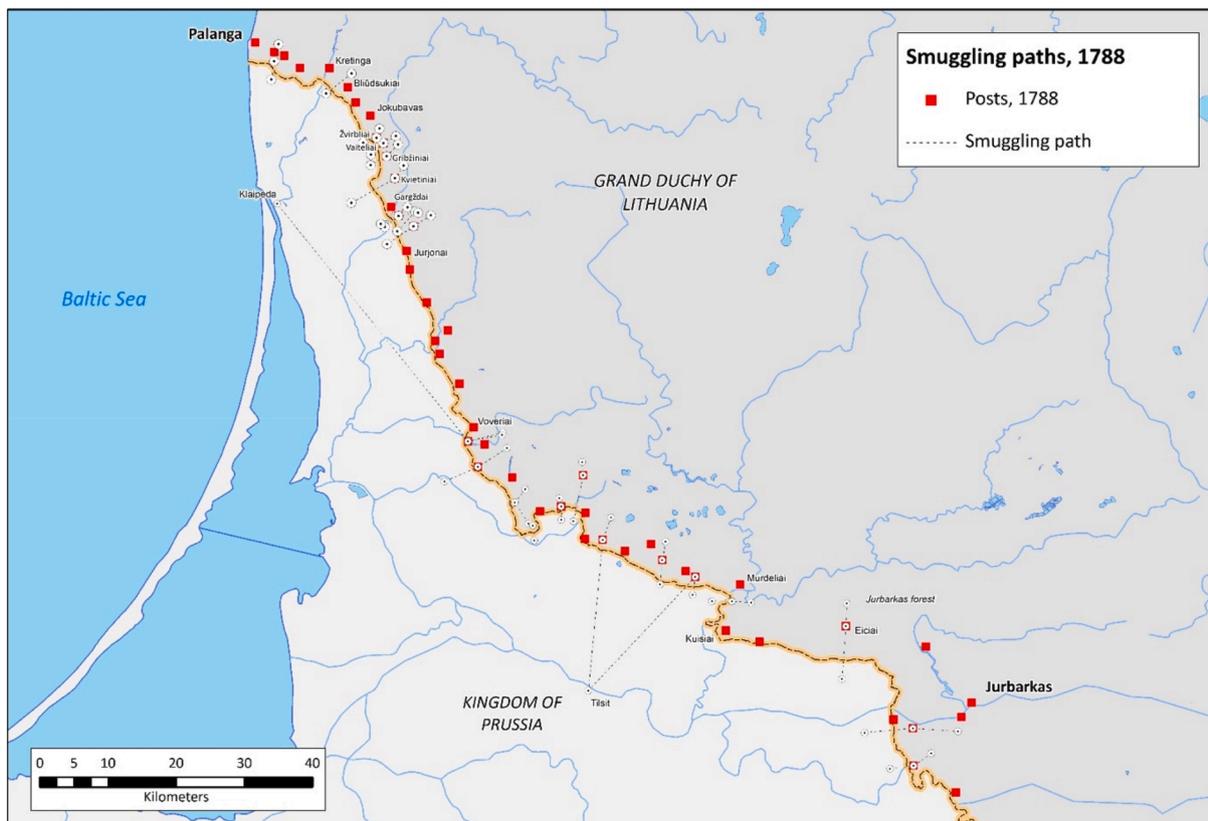
[62] Leparski, Obwodnica.

Fig. 3. Posts and smuggling paths, 1788. (The locations identified are also mentioned in the text.) Map by authors.

Scholarship on border performance emphasizes that borders are enacted by state and non-state actors alike, including smugglers: 'border crossers and border agents each perform complementary and antagonistic roles.'[63] Leparski himself seemed acutely aware of this interplay, describing in his report how 'the head-guard post at Mantviliai must monitor the village of Globiai which lies a full mile away …; and although the merchants did not drive through this location to avoid inspections because there was no post at Mantviliai up until now, however when there will be a post they will be prevented from travelling in the usual way again'.[64] He saw the borderland as a stage for a cat-and-mouse game, where state efforts to control smuggling led smugglers to seek new paths. Leparski literally recommended a 'trap' (*matnia*) to be set up in the northern Palanga customs region to counter smuggling into Klaipėda (then Memel) consisting of four new guard posts—Žvirbliai, Vaiteliai, Gribžiniai, and Kvietiniai—carefully placed to intercept smugglers.[65]

Leparski's observations reveal that smuggling paths were not only plentiful (with forty-five identified) but also clearly visible from major roads and often intersected these roads. (Since the precise location of these 'public roads' are unclear, we mapped them in Fig. 4 as straight lines connection settlements within the GDL.) This contrasts with Ogiński's 1788 report, where smuggling paths were largely concealed, reflecting an increasingly sophisticated customs system and as a result also a more sophisticated smuggling operation.[66] By 1788, the customs network was more firmly established, and visible smuggling paths were no longer as prevalent as in 1769, suggesting a gradual shift from open to covert smuggling in response to enhanced state enforcement. Smuggling routes noted by Leparski spanned the entire GDL-Prussia border, from Jurbarkas to Palanga, with only a few minor interruptions. Multiple paths converged in central areas, forming dense clusters as seen in Fig. 2.

In summary, our historical mapping of the GDL-Prussia border highlights a dynamic, evolving frontier shaped by both official and unofficial actors. State inspectors like Leparski and Ogiński, and the smugglers they encountered, contributed to a continual negotiation of border control, a process captured in their reports. Their observations reveal how the GDL's customs infrastructure responded to and shaped the borderland's smuggling practices, framing the GDL-Prussia border as a complex and layered zone of interaction, adaptation, and state performance.

Mapping the topologies of a lively border

The turn to topological visualization in this section reflects a broader effort within spatial history and the spatial humanities to move beyond strictly Euclidean representations of territory.[67] Whereas topographic maps emphasize distance, position, and scale, topological diagrams foreground relations, connectivity, and clustering—features particularly well suited to analyzing borders understood as lived, negotiated, and networked spaces. By abstracting from exact geographic coordinates, topological mapping allows us to visualize how smuggling routes linked disparate

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[63] Johnson et al., 'Interventions on Rethinking "the border"', p. 67.
[64] Leparski, Obwodnica.
[65] Leparski, Obwodnica.
[66] Ogiński, Lustracya.

[67] *Deep Maps and Spatial Narratives*, ed. by David J. Bodenhamer, John Corrigan and Trevor M. Harris (Bloomington: Indiana University Press 2015).
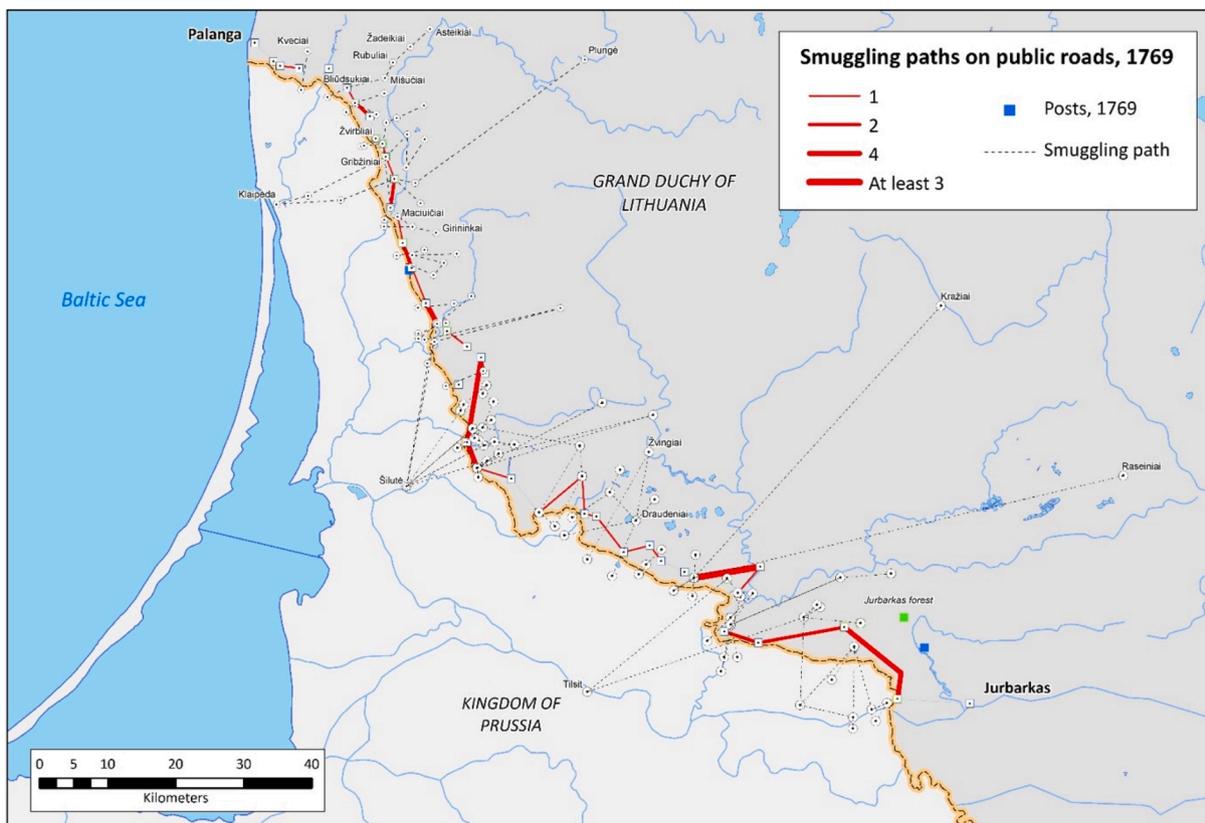
Fig. 4. Smuggling paths on public roads, 1769. (The locations identified are also mentioned in the text.) Map by authors.

locations, how customs posts functioned as nodes within enforcement networks, and where gaps in surveillance emerged.[68] This approach does not replace topographic mapping but complements it, offering a relational perspective on bordering practices that is difficult to capture through cartographic geometry alone.

In Fig. 5, we reimagine Fig. 2 by presenting smuggling paths as a network of connections between locations, expressed topologically rather than topographically. While Fig. 5 does retain elements of topography, the intent here is to emphasize relationships over positional accuracy. First, the border itself is represented as a straight line aligned at 21.051 E longitude, a foundational axis for this visualization. Smuggling paths originating in the GDL and ending in Prussia are identified by their origins in the Palanga ('P' paths) or Jurbarkas customs posts ('J' paths). Each dot along these paths marks a location on a smuggling route, with intervals set at 0.127° of longitude, regardless of actual distance, establishing a uniform visual rhythm. The latitude of each starting point in the GDL governs the latitude of all connected points along a given smuggling route, while the posts are placed along the border at accurate latitudinal positions to preserve their sequence from north to south. This approach allows us to visualize multiple paths originating from the same location, even if they diverge at different endpoints. For instance, paths P2 and P4 both begin in Judrėnai, yet P2 concludes in Šilutė, while P4 extends directly into Prussian territory. This visualization, lacking in positional accuracy, offers insights into the structure and clustering of smuggling networks, the relative length of various paths, and the relational connections they illustrate. For example, paths P12, P13, and P14

each begin in different GDL locations and end in Klaipėda. Yet, they vary in composition: P14 consists of seven nodes (four in the GDL, two in Prussia, and one at the border), P13 includes six nodes, and P12 has five, revealing how path complexity varies even among routes leading to the same destination. The distribution of customs posts between Jurbarkas and Palanga provides further insights into these smuggling dynamics. Both regions have a similar number of posts—thirteen in Jurbarkas and eleven in Palanga—yet the Jurbarkas customs area shows a greater number of smuggling paths, with thirty-four paths compared to Palanga's twenty. This variation points to structural differences in how customs posts were organized and positioned. The visualization suggests that while posts were more strategically positioned in Palanga, providing more extensive monitoring coverage, smuggling paths connect a higher number of distinct locations in Palanga than in Jurbarkas. This difference is particularly evident in the networks observed in northern Palanga.

Spatially, smuggling paths and posts cluster in specific ways, revealing patterns of connectivity and potential weak points in enforcement. Between posts J33 and J17, for instance, a dense network of paths is punctuated by a post at Ramoniškiai, with Inkakliai positioned directly to the north and Žemaičių Naumiestis to the south. Conversely, the Jurbarkas forest area, notably between J5 and J12, reveals an absence of posts, creating a gap in the border enforcement grid. These observations highlight the varied geographical distribution of customs posts and suggest areas where smuggling may have flourished in the absence of a robust surveillance presence. In this representation, we move away from static, rigid views of borders, embracing a model that captures the fluid relationships that smuggling networks reveal. By emphasizing relational rather than strictly spatial connections, this

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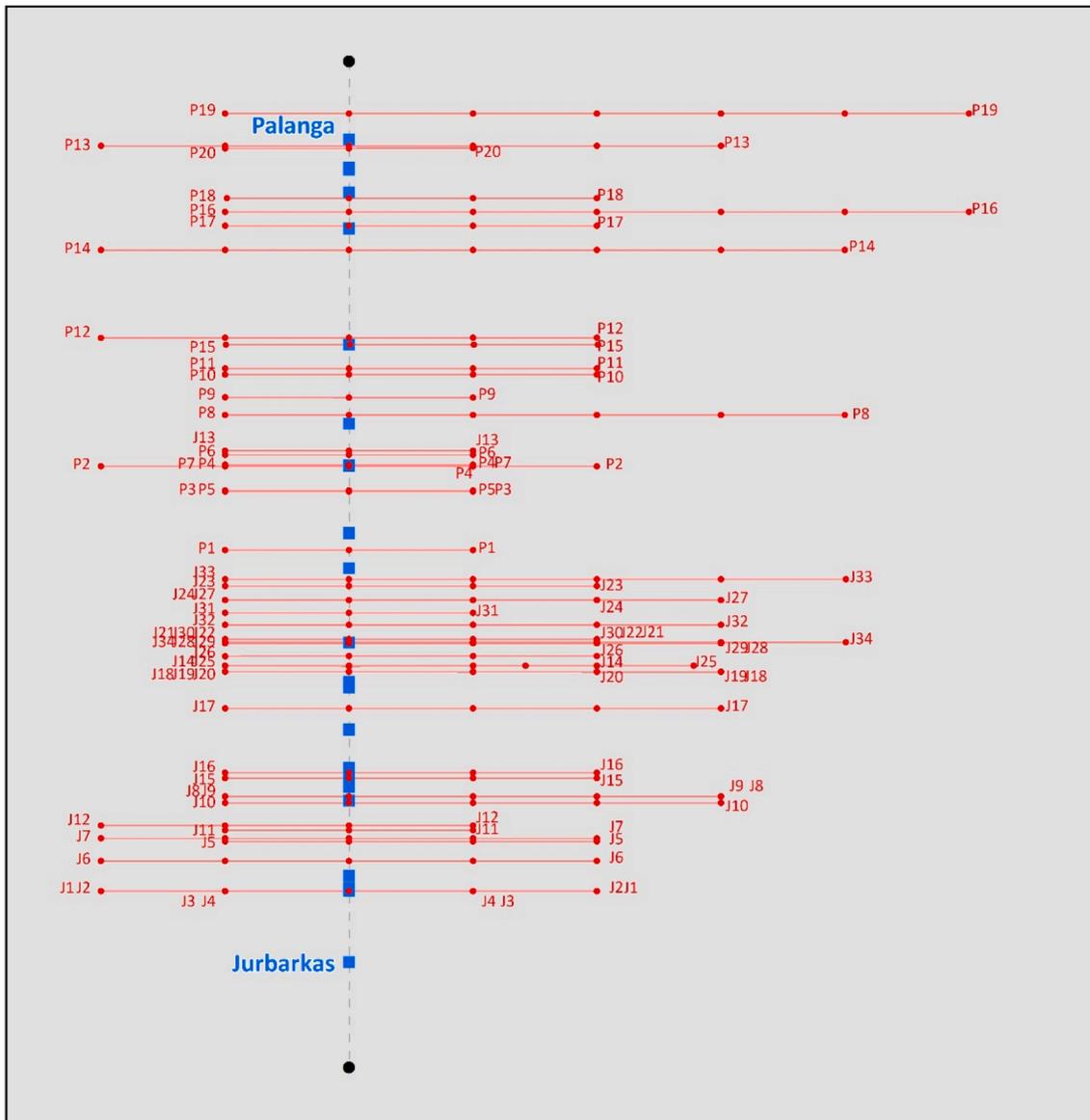68 Smith, 'Networks, Territories, and the Cartography of Ancient States'.

Fig. 5. Smuggling paths topology, 1769. Map by authors.

mapping approach sheds light on the border's lively topology, where dynamic interactions between spaces and actors continuously reshape its structure.

Mapping the evolving border: dynamics and implications

The GDL-Prussia border was far from a fixed line; it was a fluid and ever-changing boundary. A comparison of guard posts from 1769 to 1788, as depicted in Figs. 2 and 3, reveals two critical developments. First, the network of checkpoints had expanded significantly. The number of posts increased from twenty-four to forty-nine, reducing the average distance between them from 5.5 to 3.5 km. Second, the infrastructure shifted closer to the border itself: in 1769, the average distance from each guard post to the nearest point on the border was 2.33 km, whereas by 1788, it had decreased to 1.94 km. Although these averages highlight an overall trend toward a denser customs infrastructure, they obscure the variations found along different stretches of the border. In fact, when comparing the guard posts documented by Leparski in 1769

with those noted by Ogiński two decades later, it becomes clear that the increase in posts was not uniform. Rather, new posts clustered in specific sections of the border.

Figure. 6 illustrates how the guard posts established by 1788 do not neatly align with Leparski's proposals in 1769. In the northern Jurbarkas customs region, for example, Leparski recommended two new guard posts to counter smuggling routes he had observed. Only one of these was realized, while two additional posts were established to the south of his proposed locations. In the central region, Leparski highlighted 'the great need to establish a head-guard post at Girininkai because there are many smuggling paths, especially from Kražiai, Raseiniai, and many other locations'.[69] His request was only partially fulfilled, with a sub-guard post eventually established in Girininkai. However, his calls for new posts near Jurbarkas fell largely upon deaf ears, most evidently in and around the Jurbarkas forest, where Leparski
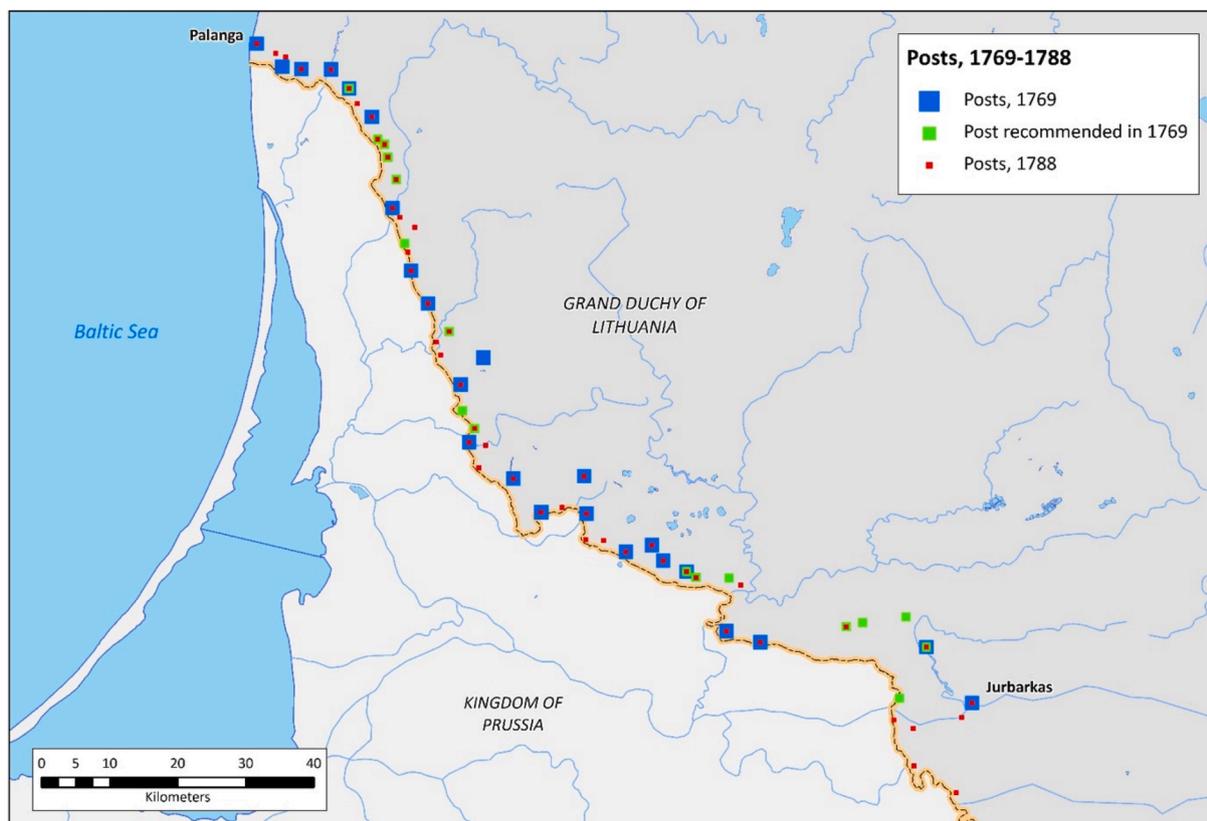
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[69] Leparski, Obwodnica.

Fig. 6. Guard posts, 1769–1788. Map by authors.

proposed the establishment of four new guard posts. By 1788, only one, at Eičiai, had been established. (Note that in the 1788 map, five additional posts further south were in a different customs district and were thus not part of Leparski's 1769 inspection.) The selective implementation of his recommendations may reflect the seasonal nature of timber smuggling in this region, where trees were cut down in winter and smuggled to Prussia in spring in a process that took several days and was therefore relatively easy to observe and possibly interrupt even by a single guard. In other cases, the state was more strategic in adopting Leparski's suggestions. The sub-guard post at Girininkai, for instance, which Ogiński later reported as collecting little to no customs revenue, was nonetheless established to curb smuggling, as Leparski had recommended. This was not an isolated case; other posts, such as Kirkilai and Buikiškė in the Jurbarkas district and Maciuičiai in Palanga, served primarily as anti-smuggling measures rather than significant revenue generators.

The impact of increased guard posts and an improved customs infrastructure is evident in the 1788 inspection by Ogiński, who observed fewer smuggling paths than Leparski had in 1769. In the Palanga district, particularly between Jurjonai and Voveriai, no smuggling paths were reported. Similarly, along the river Minija near Palanga, between Asteikiai and Bliūdsukiai, there were far fewer smuggling paths than previously recorded. In areas where smuggling persisted—such as between Voveriai and Murdeliai and between Jokūbavas and Jurjonai—the activity was still less frequent than in Leparski's earlier account. While Ogiński's main focus was administrative, he often addressed smuggling issues, mentioning them in twenty of forty-nine posts. In fourteen instances, he explicitly noted the existence of smuggling paths. Ogiński was also proactive in his efforts, frequently implementing on-the-spot measures to counter smuggling. For instance, he

ordered 'the illustrious superintendent to post a mounted guard' to monitor smuggling at an inn near the Kuisiai post and directed 'the authorities of the Palanga customs to dig up … smuggling paths' along the road between Kretinga and the Bliūdsukiai post.[70]

The maps presented in this article underscore the extent to which the GDL-Prussia border was trafficked in the latter half of the eighteenth century. When viewed alongside Leparski's and Ogiński's reports, they reveal the changing scope and nature of movement across the border over time, with the densification of border infrastructure as a response to Leparski's awareness of the border's porous nature. As depicted in Fig. 5, the degree of porosity was not uniform along the border's entire length, which is to be expected given that 'borders and border permeability are inherently subjective phenomena', shaped by shifting legal, historical, social, and economic contexts.[71] The GDL-Prussia border's permeability indeed varied, influenced by these exact factors, with different sections exhibiting differing levels of enforcement and control.

Conclusions

At its core, this article suggests that the GDL–Prussia frontier was neither a marginal strip nor a uniformly guarded wall but a space where enforcement and evasion were mutually constitutive. Smuggling did not simply happen despite the state; it co-produced the conditions under which the state sought to make itself present. The customs network, in turn, did not simply repress circulation; it re-routed it, altered rhythms and risks, and reshaped local

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[70] Ogiński, Lustracya.
[71] Alexander C. Diener and Joshua Hagen, *Borders: A Very Short Introduction* (Oxford: Oxford University Press, 2012) p. 59.

expectations about movement, livelihood, and authority. By reading two inspections together and by mapping in both topographic and topological registers, we show how these shifting relations composed the border in practice. We argue that the GDL—Prussia borderland functioned as a negotiated sovereignty regime in which enforcement and evasion were mutually constitutive.

The GDL-Prussia border of the late eighteenth century provides a compelling case study of the evolving nature of borders as socially constructed, dynamic spaces rather than fixed lines of territorial demarcation. For the state, the customs posts and guard stations were formal mechanisms for asserting control and collecting revenue, marking the state's authority over the movement of goods and people. Yet for local actors, the border was also an opportunity—an economic resource to be navigated, leveraged, and occasionally evaded. Smuggling routes were not just paths through the woods or across rivers; they were lifelines that sustained local economies and built connections across political boundaries. These overlapping performances illustrate that borders are not passive divisions but active spaces of negotiation, shaped as much by those who cross them as by those who enforce them.

The evolution of the GDL-Prussia border over the two decades between Leparski's and Ogiński's inspections underscores the adaptability of borders as they respond to political, economic, and social pressures. This process of adaptation reflects the idea of strategic bordering, where the state focuses its resources on high-priority areas rather than attempting to enforce uniform control. As Ogiński's observations demonstrate, customs infrastructure was densified selectively, with certain regions like Palanga receiving more enforcement attention due to their economic significance. This selective enforcement created a patchwork of control, where heavily monitored areas coexisted with zones of relative permeability, challenging the notion of borders as homogenous, impermeable lines.

The story of the GDL-Prussia border prompts a reconsideration of traditional ideas of sovereignty and territoriality. The state's authority in the borderlands was neither absolute nor uncontested; rather, it was conditional, dependent on factors such as local cooperation, economic incentives, and resource availability. Leparski's and Ogiński's reports reveal that much of the state's power in the region was provisional, shaped by its ability to adapt to the behaviours and practices of those living within the borderlands. This form of negotiated sovereignty suggests that borders are not simply sites of control but relational spaces, where the state's authority is continually constructed through its interactions with local communities. For the GDL, the border with Prussia was a zone of both opportunity and limitation, where the state's efforts to assert control coexisted with local practices that prioritized mobility and trade.

Writing in the context of the mapping of the b/ordering of migration, van Houtum critiques the persistent use of 'static border-geometry,' describing it as the prevailing mode of representation in media, education, politics, and academia, and observing how 'it is remarkable that we have still not overcome the Euclidean geometry of maps, whereas the representation of people and their relationships have gone through a revolutionary phase. I am thinking especially of the representational world of the internet (e.g., Facebook, LinkedIn, YouTube)'.[72] Echoing this perspective, and responding to Allison Mountz's challenge to

geographers to find innovative mapping techniques to map bordering rather than borders, we present an alternative visualization approach, not by entirely abandoning Euclidean geometry but by highlighting the relational essence of the border as a material location and as a network of evolving relationships.[73] The case of the GDL illuminates the longue durée of bordering as a process—one that entwines revenue extraction, quotidian livelihoods, and cartographic imaginations—and offers transferable methodological lessons for mapping lively borders in other times and places. Mapping historical borders as lively entities that shift in response to state enforcement strategies reflects not only historical realities but also fits with Agnew's wider critique of what he dubs 'methodological nationalism', the uncritical acceptance of the nation-state and its boundaries as fixed and a priori.[74]

Beyond its empirical contribution to the history of the GDL—Prussia frontier, this article speaks to broader debates in spatial history, digital humanities, and historical cartography about how borders can be represented without reducing them to static lines. By combining topographic and topological mapping, we demonstrate how spatial visualization can function as a form of historical argument—one that makes visible the relational, adaptive, and negotiated character of sovereignty. In doing so, the article contributes to ongoing efforts to develop mapping practices capable of representing historical processes that were fluid, contested, and unevenly enforced, rather than territorially fixed or uniformly experienced.

Ultimately, the study of the GDL-Prussia borderland underlines the need for a historical perspective on borders.[75] Without adopting a presentist approach that forces the lively GDL-Prussia border of the late eighteenth century into the conceptualisation of bordering in the contemporary globalised world, there is value in recognising the persistence of a number of key trends across the long history of the modern state. This invites us to see borders as longue durée processes of inclusion and exclusion, negotiation and adaptation, that have persisted and evolved across time and space. The fluid and fragmented nature of the GDL-Prussia border, where smuggling paths and customs posts coexisted in a constant state of adjustment, mirrors the challenges faced on modern borders today. It is worth noting that the dissolution of the Polish-Lithuanian Commonwealth in 1795—when this frontier became the western border of the Russian Empire—did not significantly alter the lifestyles of these borderlanders. Well into the nineteenth and even in the twentieth century, and despite the growing number of border control officers, Lithuanian villagers originating from the places mentioned by Leparski and Ogiński in their reports continued to cross the border on their own terms and smuggled salt, spirits, and other commodities to their communities.[76] Rejecting claims of a 'borderless world' under globalization, Randy Widdis demonstrates that borders remain paradoxical: mutable and historically contingent yet never disappearing. For Widdis, understanding the present requires historical geographical perspectives that show how bordering is always entangled with shifting global, national, and regional processes.[77]

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[72] Henrik van Houtum, 'Remapping borders' in *A Companion to Border Studies*, ed. by Thomas M. Wilson and Hastings Donnan (Oxford: Blackwell, 2012) pp. 405—418 (pp. 408; 413).

[73] Johnson et al., 'Interventions on Rethinking "the border"', p. 65.

[74] Agnew, 'The Territorial Trap', p. 59.

[75] Anssi Paasi, 'The Changing Discourses on Political Boundaries: Mapping the Backgrounds, Contexts and Contents', in *B/ordering Space* ed. by Henrik Van Houtum, Olivier Kramsch and Wolfgang Zierhofer (Aldershot: Ashgate 2005), pp. 17—31 (p. 19).

[76] As shown in a c. 1917 photograph of smugglers from Skomantai, the same village mentioned by Ogiński in his report. See https://www.limis.lt/valuables/e/805759/228371073?searchId=96315529.

[77] Randy Widdis. 'New Directions at the Border: A Historical Geographical Perspective', *Journal of Borderlands Studies*, 36 (2021), 853—871.

Data availability

The authors do not have permission to share data.