The Local Politics of Border Control: Transnationality, Resistance, and Accommodation

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Version: December 3, 2025

ABSTRACT

States are increasingly hardening borders. Scholars have dedicated substantial attention to this phenomenon, but little is known about its local politics. This study takes up the challenge of theorizing borderlands as unique geopolitical spaces and the communities therein as central actors. Transnational communities with cross-border ties depend on mobility, which disposes them to contest border hardening. Yet, if hardening accommodates local ways of life, resistance is less likely to emerge. This theory is both tested and developed via a mixed-methods design leveraging the coronavirus pandemic context in which most states closed their borders. Global quantitative analysis finds that an original geospatial measure of transnationality predicts local protest against border closures. Interviews in two outlier communities that are highly transnational but did not resist a border closure show that the policy's accommodation of border-related industries forestalled discontent. This finding indicates that selective border hardening, which accounts for local flows, mitigates conflict. The results point to local communities as a key actor in border politics deserving more attention.

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Introduction

International border politics is undergoing a profound transformation. States are building new infrastructures like walls and reshaping sovereignty by co-governing with neighbors (Simmons and Kenwick, 2022; Diener and Hagen, 2012; Longo, 2017; Agbiboa, 2017). Discourse characterizing borders as sites of threat and vulnerability defines populism and the backlash against globalization (Simmons and Shaffer, 2024; Simmons and Goemans, 2021; Brown, 2010). Given the normative stakes of these processes, scholars have devoted substantial attention to the politics of border hardening. The literature has advanced significantly from documenting the global trend of hardening toward explaining why it occurs (Carter and Poast, 2017; Hassner and Wittenberg, 2015; Avdan, 2018; Andreas, 2010; Linebarger and Braithwaite, 2022) and unpacking whether and how it actually impacts cross-border flows (Avdan and Gelpi, 2017; Carter and Poast, 2020; Carter, Donahue and Williams, 2024; Getmanski, Grossman and Wright, 2019; Schon and Leblang, 2021; Kim and Tajima, 2022; Linebarger and Braithwaite, 2020).

This research is crucial for identifying how states can manage the perennial challenge of facilitating beneficial flows while limiting harmful ones. However, it tells us little about border politics "on-the-ground." Aside from scattered studies (e.g., Blair, 2024; Cortina, 2019; Whitaker, 2023; Gavrilis, 2008), important questions remain unanswered: to what degree is border hardening salient to local communities? How does it impact their well-being? And when do local communities oppose hardening? This deficit in knowledge is striking given that 1.8 billion people (23% of the human population) live within 50 miles of a land border.[1] While the notion that border areas are unique is not new (Baud and van Schendel, 1997), more knowledge is needed to explain exactly why this matters for the politics of contemporary border hardening.

I address this gap by telling a bottom-up story of border politics. I take up the challenge of showing, first, exactly how borderlands are unique geopolitical spaces and, second, how the communities therein are central actors in border politics. This framework problematizes both the local community and the nature of bordering. The theory focuses on transnationality, defined here as the extent to which a community in a borderland is economically and socially connected to society across the border. Border control is salient for communities whose way of life revolves around interaction and exchange across borders. In the face of disruption, such communities are disposed to challenge the state, even over hardening strategies that receive broad support at the national level. Yet, the more a given strategy accommodates transnational practices, the less likely conflict is to emerge. Such selective bordering, as I term it, shows that states have leeway in the extent to which their policies affect local populations.

I evaluate and develop this general theory via a mixed-methods design leveraging the COVID-19 pandemic context. Virtually all states with land borders closed them during the pandemic with robust public support (Lindholt et al., 2021; Chilton

[1] This calculation used population data from LandScan Global Data 2024 (Sims et al., 2022) and the borders data from this study.

et al., 2023; Bricker, 2020), providing an opportunity to compare local reactions to a comparatively exogenous form of border hardening. The first component of the design is a deductive global quantitative analysis of transnationality, captured with an original geospatial measure, and hand-coded events data derived from the Armed Conflict Location & Event Data Project. The key finding is that transnationality predicts local protests/riots against pandemic border closures.

The second design component is case study analysis of two communities in the U.S. that are highly transnational but did not resist pandemic border hardening. Studying such "deviant cases" (Levy, 2008), or "off-the-line" observations (Lieberman, 2005), is an opportunity to inductively refine the theory. Fieldwork interviews with local stakeholders indicate that the closure's impact was substantially diminished because it made exceptions for flows associated with key industries. Such "selective" bordering with scoped targets is less likely to threaten transnational interests, ultimately mitigating conflict.

This study makes four contributions to the study of border politics. The first is advancing a theory for the macro-level-oriented literature to explain how local communities use their agency to engage with border politics, which highlights that the contexts in which border control is enacted are diverse. The second contribution is to spotlight an under-recognized tension in border politics. For local populations, hardening does not necessarily tap into the same anxieties that scholars have emphasized in national sentiments. The proliferation of border control should thus be understood as a point of tension not only with the liberal international order (Simmons and Goemans, 2021) but with some populations in domestic politics. Third, addressing how to navigate that clash, I highlight the phenomenon of selective bordering. This innovative concept is useful for identifying variation in border hardening that matters for understanding their effects on local populations and broader flows. Finally, I demonstrate the value of mixed-method design and micro-level data for the study of border politics.

In what follows, I outline the concept of transnationality before linking it to the politics of border hardening. The subsequent sections present the two empirical tests. After reviewing the findings, I conclude by returning to broader implications for the study of border politics.

Deductive Theory

Conceptualizing Transnationality

The theoretical framework adopted here centers borderlands as a unique geopolitical space and the communities therein as central protagonists. Systematically defined concepts are needed to organize thinking around these units of analysis. Answering the call for scholarship to better specify border effects (Braun and Kienitz, 2022), I conceptualize what distinguishes life in borderlands, how this varies across communities, and why this matters for border control.

This effort hinges on the concept of transnationality, defined as *the extent to which*

a borderland community is connected to society across the border. The concept focuses on communities in the geographic areas that are both proximate to and bisected by an international land border. These borderlands include two national spaces, one on each side of a border, although it is possible for multiple borderlands to overlap.

The distinctiveness of borderlands, relative to country interiors, is physical proximity to a border. This proximity creates unique opportunities for local populations to interact and exchange with people and institutions on the other side of the border. People outside of borderlands do have some opportunity for cross-border exchange and interaction via travel, digital communication, and consumption. However, those who are physically proximate to a border have a distinctly deeper opportunity for transnational ties that are deeply embedded in day-to-day life and personal experiences like encountering people and physically crossing the border (Mirwaldt, 2010).

There are two dimensions to transnationality. The economic dimension encompasses activities like formal and informal trade, the smuggling of illicit goods, work, and shopping. The social dimension of transnationality encompasses linkages of family, ethnic kin, friends, religion, and more. Yet, the two dimensions are not intrinsically bundled; a community can be highly connected along one dimension but not the other. Further, within a community, individuals may vary in how often they personally engage in cross-border exchange and interaction.

All borderland communities share an opportunity for having ties across borders. But the extent to which transnationality actually characterizes communities varies substantially (Idler, 2019; Martínez, 1994; Wilson and Donnan, 1998). This variation manifests both within and across borderlands.

For example, extremely high transnationality characterizes many communities in the United States (U.S.)–Mexico borderland. This involves regularized patterns of many people crossing the border in both directions to work, attend school, shop, acquire medical care, and visit friends and kin (Castañeda Pérez, 2020; Díaz-Barriga and Dorsey, 2020). In such sites, residents often articulate an identity rooted in the interconnected way of life (Dear, 2020; Stea, Zech and Gray, 2010). There are also substantial illicit flows, including drug smuggling, human trafficking, and unauthorized migration, within the borderland.

Conversely, most communities on the Botswana side of the Botswana-Zimbabwe borderland exemplify low transnationality. Although Kalanga people live on both sides of this sparsely populated borderland (The New Humanitarian, 2005), the communities on the Botswana side do not have substantial transnational ties. Most movement across this border is transitory and one-sided in the form of Zimbabweans migrating to the interior of Botswana for work and security. Xenophobia against Zimbabweans is widespread throughout Botswana, including in the border region (Campbell and Crush, 2015; Campbell, 2003)

The transnationality of a borderland community is an enduring trait, but one that evolves over time. The diversity of forces that contribute to these shifts underscores how transnationality is distinct from other forms of exchange and interaction across borders that have developed, for example, through globalization. High transnation-

ality can emerge separately from or alongside state efforts to foster trade.[2]

From the top-down, state actions can shape transnationality. For example, states can manipulate the demographics of citizen populations in borderlands through displacement and other forms of violence to eliminate the ethnic basis of social ties when a threat is perceived (McNamee and Zhang, 2019; Müller-Crepon, Schvitz and Cederman, 2025). Yet, states can also contribute to transnationality via the construction of transportation infrastructure for trade, which can indirectly stimulate a new economy for local communities or intentionally formalize smuggling institutions (Su, 2022).

As for bottom-up forces, local actors can use their agency to shape transnationality. Communities may pursue cross-border economic linkages such as formal or informal trade to stimulate development, which can be especially important for what are often otherwise peripheral areas (Idler, 2019; Gallien, 2020; Matanzima, Helliker and Pophiwa, 2023; Miggelbrink, 2014; Su, 2022). This was the origin of Euroregions, or binational zones of institutional cooperation along borders between local and regional governments within the European Union, although national states have found over time that they benefit from supporting these (Markusse, 2011). People in borderlands may also pursue social linkages across borders, especially for minority ethnic groups whose existence predates colonial-era borders (Ghosh, 2011; Musoni, 2020; Moyo, 2016).

Overall, transnationality is a dynamic characteristic of borderland communities. Populations in these areas vary in their degree and form of cross-border ties over space and time. In highlighting cross-cutting linkages, the concept of transnationality speaks to the significance of territory in contemporary politics. The spatial delineation of ethnic groups has been identified as a key historical motivation for where elites and political entrepreneurs sought to locate borders, specifically in Europe and Asia (Müller-Crepon, Schvitz and Cederman, 2024). However, the prevalence of transnationality throughout some borderlands underscores the incomplete nature of such ethnonationalist projects.

Resistance Against Border Hardening

The theory presented here centers transnationality in an explanation of how local borderland communities engage with border hardening. The idea that they actively make demands over what states should and should not do at their borders is not new. Classic scholarship highlights, for example, instances when local communities have demanded the consolidation of borders while the state had other goals (Sahlins, 1989). However, the account here presents a different dimension of the story: why local communities would oppose border hardening, as well as what states can do to mitigate this conflict. This theory helps to explain the dynamics of contestation over highly salient and proliferating policies that often receive broad support at the national-level. In explaining local resistance, this study reinforces the idea that local agency is central to border politics.

[2]The conceptualization here is distinct from other areas like migration studies that use transnationality to refer to long-term ties held by migrants with their home countries (Levitt and Jaworsky, 2007).

Transnationality is an important force in border politics because it shapes local interests. Highly transnational communities more broadly value open mobility as the basis on which local life depends. In turn, they are more likely than other borderland communities to challenge disruptions to cross-border exchange and interaction. This dynamic is not captured in existing theories that tend to homogenize national public support for border hardening as driven by a shared sense of threat.

Transnationality consists of regular interaction and exchange across a border (Martínez, 1994; Castañeda Pérez, 2020). Such repeated and beneficial interaction, in the framework of contact theory, fuels positive perceptions of people across the border (Mirwaldt, 2010). This interaction and exchange also creates dependency on open mobility for citizens, firms, and elites that incentivizes support for policies that sustain these activities. The benefits encompass both economic and social activities including the revenue yielded through trade, smuggling, or labor, and the value of social relationships, leading to a broader political preference for open mobility. This logic follows work finding that people in areas that benefit from economic openness have different attitudes and political behavior around trade policy than areas that are harmed by import competition (e.g., Jensen, Quinn and Weymouth, 2017/ed). Overall, the more transnational a borderland community, the more that open mobility is the desired status quo.

Further, people in highly transnational communities often foster a sense of cross-border belonging. Modern technologies like the printing press and maps have propagated national and territorial conceptions of polities (Anderson, 2006; Branch, 2014; Uttal, 2000; Parellada, Carretero and Rodríguez-Moneo, 2021). However, these notions are not necessarily prominent in borderlands. Living in a highly transnational community often engenders conceptions of a cohesive social world (Ghosh, 2011; Idler, 2019; Mirwaldt, 2010; Dear, 2020). People in such settings often recognize either a blending of multiple identities or a singular identity that extends beyond the border.

Overall, highly transnational borderland communities are broadly invested in maintaining their interconnected way of life. However, this interest can clash with the turn to border hardening. The fundamental concern is that long-standing patterns of interaction and exchange will be obstructed, harming borderland communities' needs.

In the first dimension of economic ties, citizens, elites, and criminal actors in highly transnational borderland communities fear losing economic revenue gained from cross-border mobility. The concern is that border hardening will decrease formal trade, informal trade, and/or smuggling flows by slowing down or entirely inhibiting traffic from across the border through ports of entry (Blair, 2023; Carter and Poast, 2020). This would threaten livelihoods and the provision of goods.

In the second dimension of social ties, citizens and elites in highly transnational borderland communities are similarly more likely to oppose border hardening. The fear is that reductions in the entry of people from across the border limits the ability of these communities to sustain social relationships. This concern involves ties of family, friends, ethnicity, religion, and/or other kinds of social ties. Nationally oriented border hardening is seen as imposing an inflexible national identity over local, potentially more fluid, conceptions (Cortina, 2019; Díaz-Barriga and Dorsey, 2020; Dear, 2020).

I argue that the political interests associated with transnationality drive political resistance to border hardening. Resistance encompasses the range of actions in which groups demand the end or reduced intensity of a strategy adopted by the state at its border. The exemplary form is social movements in which, drawing on shared purpose and identity, people collectively confront a state via boycotts, petitions, demonstrations, strikes, and legal action (Tarrow, 2011). Social movements emerge through the convergence of three factors: political opportunity, availability of resources for mobilization structures to take shape, and framing processes of grievance that make an issue salient (e.g., McAdam, 2017; Tarrow, 2011). The initiation of a border hardening strategy is the dramatic event for transnational borderland communities that fuels grievances. Local elites who share the views and/or wish to maintain the support of local constituencies could amplify resistance by encouraging action (Ying, 2021), refusing to punish illegal actions (Garfias and Sellars, 2022), or directly making demands themselves. In all mobilization, the notion of a victimized borderland population provides a frame of reference around which to organize.

In sum, my claim is that the degree to which a borderland community is transnational shapes how it politically responds to border hardening. Comparatively more transnational communities are more likely to resist threats to local mobility across the border. The observable implication is:

> **Transnational Resistance Hypothesis:** *The more transnational a borderland community, the more likely it is to resist border hardening.*

I test this deductive expectation in the upcoming empirical analysis, but I follow it with an inductive refinement that considers how selectivity within a border hardening strategy moderates the local reaction. In brief, the logic is that "selective bordering" — state efforts to control borders whose range of targets is partially scoped — is less likely to spark a backlash from transnational communities. If the selectivity accounts in some way for the local way of life, such as by granting exceptions for a particular class of movement, then interests associated with transnationality are preserved. This reduces conflict over the shift.

Learning from Pandemic Bordering

I test the general theory in the context of the COVID-19 pandemic that began in 2020. The setting is convenient because the threat of virus transmission prompted nearly all states to restrict movement into their territories (Hale et al., 2021). Border closures were an especially prevalent strategy. They were implemented by nearly all states with land borders (89%), even in settings like the Schengen Area where intensive border control is rarely seen. While not perfectly exogenous, the adoption of border closures was uniquely prevalent and driven by the same external shock.

Pandemic border closures are different in some respects compared to other forms of border hardening. These were implemented rapidly in response to an "obvious" global threat rather than gradually over time in response to a politicized form of movement.

Closures were also inherently temporary, whereas costly physical infrastructure like walls are comparatively enduring.

Even so, examining this policy is still a useful approach for learning about border control more generally. The incentives for state actors to enact closures during a pandemic are similar to those underlying other strategies. Closures constituted a direct and highly visible step that states could take to signify proactive action in the low-information, fear-ridden environment (Kenwick and Simmons, 2020). This mirrors the logic advanced in other performative theories of border hardening (e.g., Andreas, 2010). Further, like other strategies, closures generally externalized the costs of restrictions away from the majority of domestic populations. In contrast to more controversial domestic lockdowns, survey evidence clearly indicates that border closures received broad support at the national-level (Lindholt et al., 2021; Chilton et al., 2023; Bricker, 2020).

In terms of resistance, the form that I examine is protests/riots. Such direct dissent is pertinent to the COVID-19 pandemic context. As outlined above, closures were adopted broadly at a rapid pace, effectively being foisted upon populations in borderlands irrespective of prevailing sentiment. If such an event indeed clashes with transnationality as theorized, protests and riots are the relevant response to examine.

On this note, given the substantial public support for closures, the varied but meaningful level of contestation by borderland communities is striking. Resistance events in border areas took place across approximately 70 countries, as the data presented below shows. In fact, not only did political mobilization about closures take place primarily within borderlands rather than the interior (86%), but the majority of these events opposed rather than supported the strategy (93%). This divergence indicates a substantial gap in the politics of pandemic border hardening on two axes: between national publics and borderland communities, and between borderland communities themselves. In this way, the COVID-19 pandemic provides an opportunity to investigate the local politics of a form of bordering that was not only common but, for national publics and political elites, broadly uncontroversial.

Leveraging this context, my mixed-method design consists of two elements. The first is a global quantitative analysis of transnationality and resistance events against coronavirus border closures, which tests the deductive **Transnational Resistance Hypothesis**. The second component is a pair of inductive case studies investigating two borderland communities that deviated from the theory, which I use to develop the concept of selective bordering.

Quantitative Evidence

The phenomena of interest are the transnationality of borderland communities and whether they politically resisted border restrictions during the coronavirus pandemic. In order to quantitatively evaluate the relationship between the two, I create an original measure of *Transnationality* and hand-code existing political events data.

Measuring Transnationality

My original geospatial measure of transnationality has global coverage. Prior empirical contributions to the study of border politics include various datasets on state infrastructure at borders (e.g., Simmons and Kenwick, 2022; Kenwick, Simmons and McAlexander, 2023) or the qualities of borders like permeability (Deutschmann, Gabrielli and Recchi, 2023) and legibility (Kenwick et al., 2025). The measure of transnationality presented here, however, is the first to capture spatial variation in the cross-border ties among local populations, below the state- or dyad-level.

The dataset consists of 30x30 kilometer (KM) grid cells over landmass areas within 50 miles, or approximately 80 KM, of all 306 international borders. Treating populated cells as proxies for local communities, each is scored on an additive index for transnationality by aggregating information on their relative proximity to a series of items signifying connection across the nearby border. The ideal type of information for this purpose would be hyper-local and time-varying data on the frequency and direction of all flows across all parts of all borders for local residents, licit trade, and illicit smuggling, as well as granular information on local identities over time. Such data, however, simply does not exist at a global scale. The next best approach that I take is to identify, per community grid cell, its relative proximity to roads, railroads, ethnic homelands, and sister cities that physically reach or extend across the nearby border. Community cells that are closer to these items are scored as more transnational on the index, which has 21 unique values between 0 and 5.

Extensive detail on the measurement process is provided in Appendix 1. Below, Figures 1, 2, 3, and 4 present visualizations of each measurement step. These use the example of the Czechia side of the Czechia—Poland borderland, which varies in both the items that are present as well as how distant they are from the borderline itself. Figure 1 shows how a border is first derived from two country shapes and, in turn, the 50-mile zones capturing both parts of the borderland. Figure 2 then shows, at the original 1x1KM cell size, the community cells' distance from each item. Figure 3 presents these after the cells are aggregated to 30x30KM and after the original raw distance values to each of the items are ordinalized. Finally, Figure 4 shows the final values that the communities in this borderland receive on the transnationality additive index.

A series of validity tests provide evidence that the measure meaningfully operationalizes the concept of transnationality (Adcock and Collier, 2001). First, affirming that transnationality goes beyond borderland-interior differences to describe variation within borderlands, transnationality and physical distance from the border itself are weakly correlated ($\rho = -0.33$). Further, altering the measure by excluding the unique sister cities item yields substantively similar results (see Appendix 6). Next, I conduct nomological validity tests, which entail assuming the truth of a reasonable hypothesis and empirically evaluating whether analysis with the measure can produce the corresponding result. The two assumed hypotheses here are that transnationality should predict greater wealth among borderland communities and that travel to borders should be more efficient from comparatively more transnational communities. The results detailed in Appendix 2 provide evidence for this form of validity.

Figure 1: Creating Borderlands

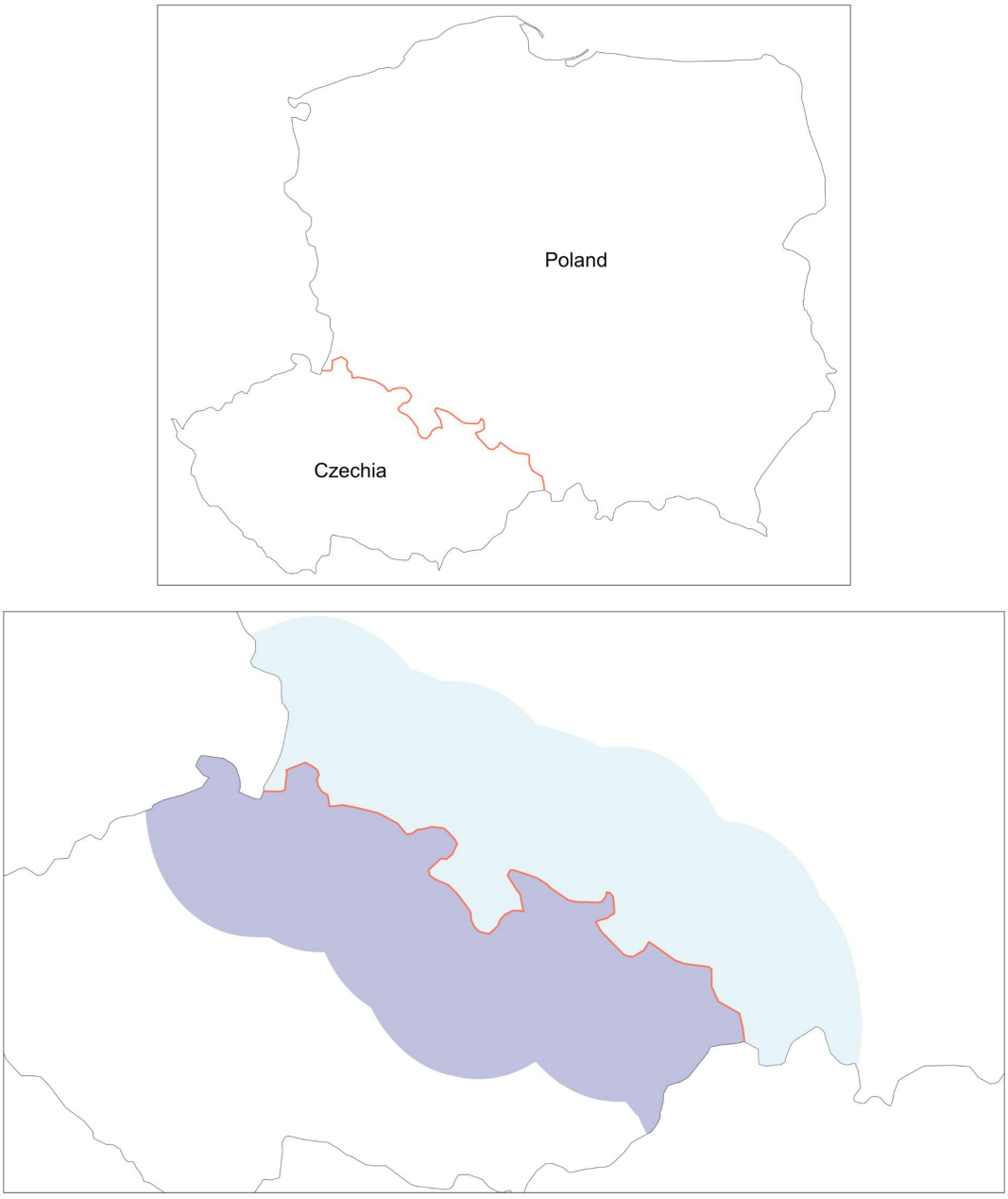


Figure 2: Items at 1x1KM Cell Size

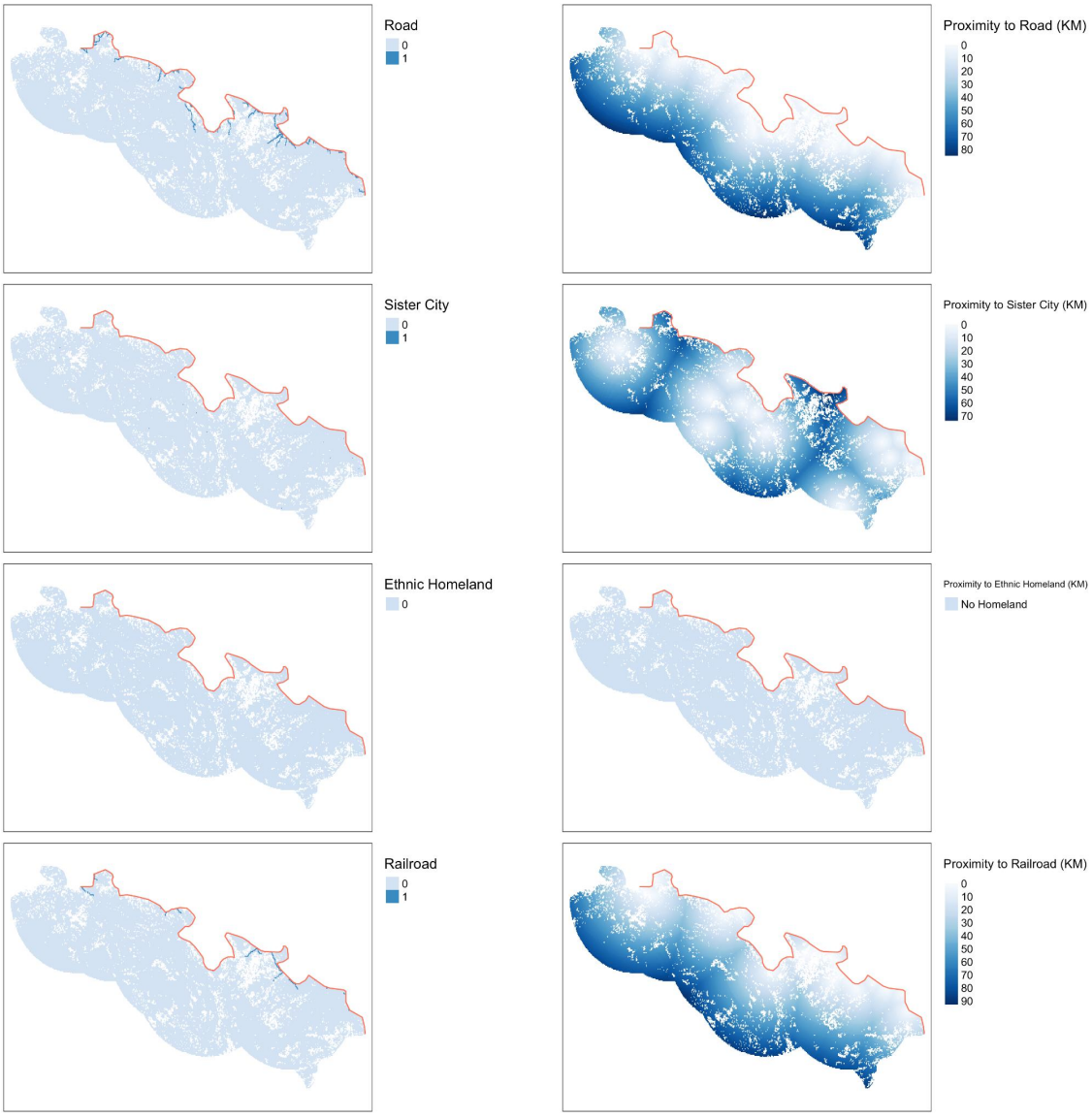


Figure 3: Items after Aggregation to 30x30KM Cell Size and Ordinalization

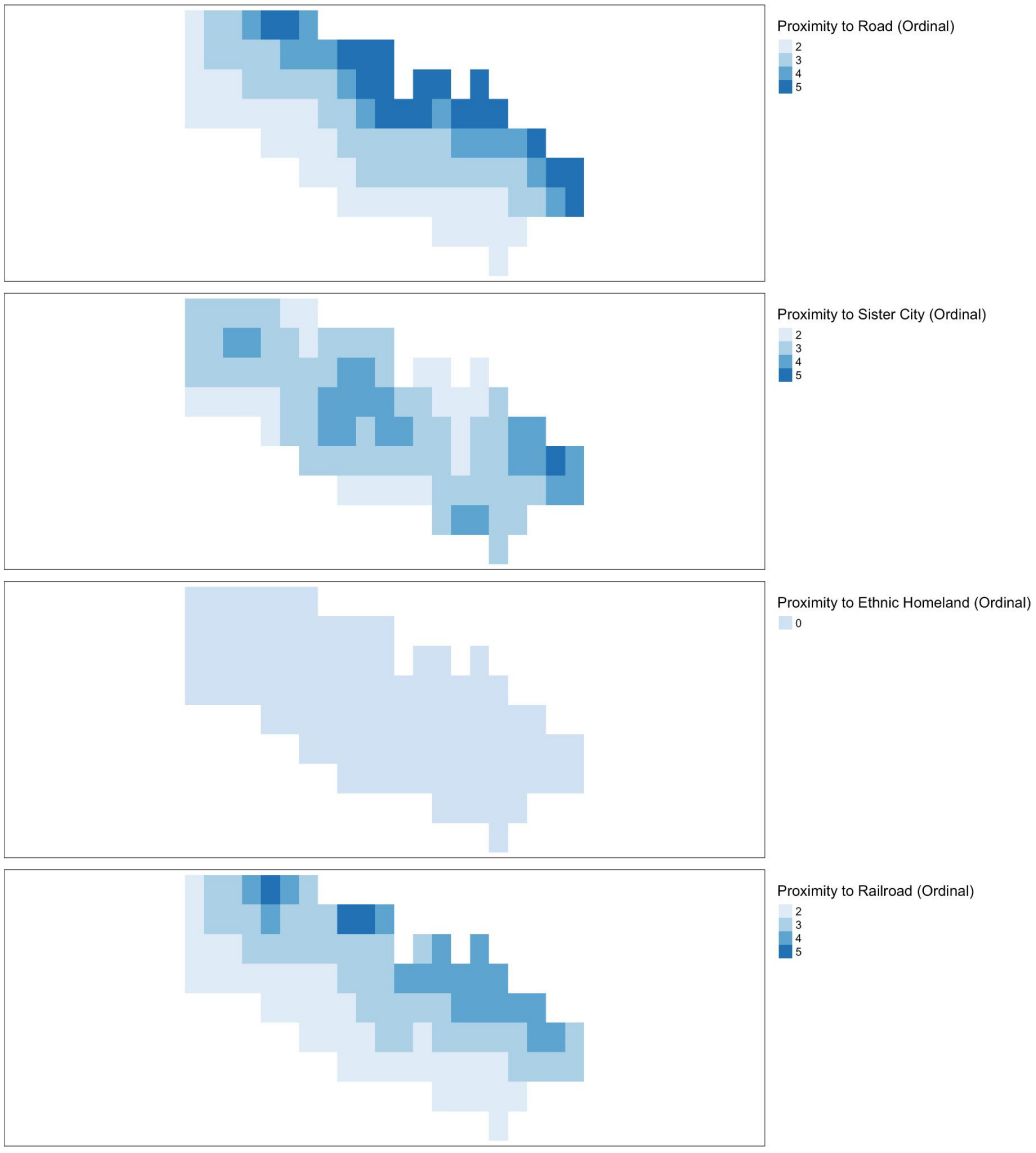
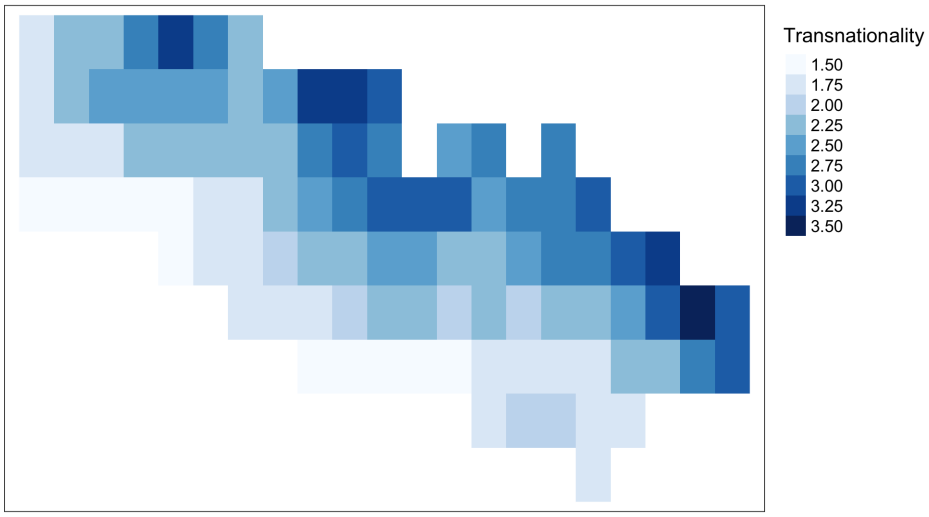


Figure 4: Transnationality Index Values



Additionally, Appendices 3, 4, 5, and 6 provide robustness checks of all validity tests and other analyses in the study. This includes evaluation of the modifiable areal unit problem by replicating results after using different grid cell sizes.

Measuring Resistance

Resistance is measured as a binary variable indicating whether or not a protest or riot against a pandemic border closure enacted by a community's own state took place within a given cell. The data is derived from the Armed Conflict Location & Event Data Project (ACLED), a widely used source that tracked which of their events related to any aspect of the pandemic (Armed Conflict Location & Event Data Project, 2025). This dataset includes approximately 63,000 geolocated events accompanied by brief qualitative descriptions.

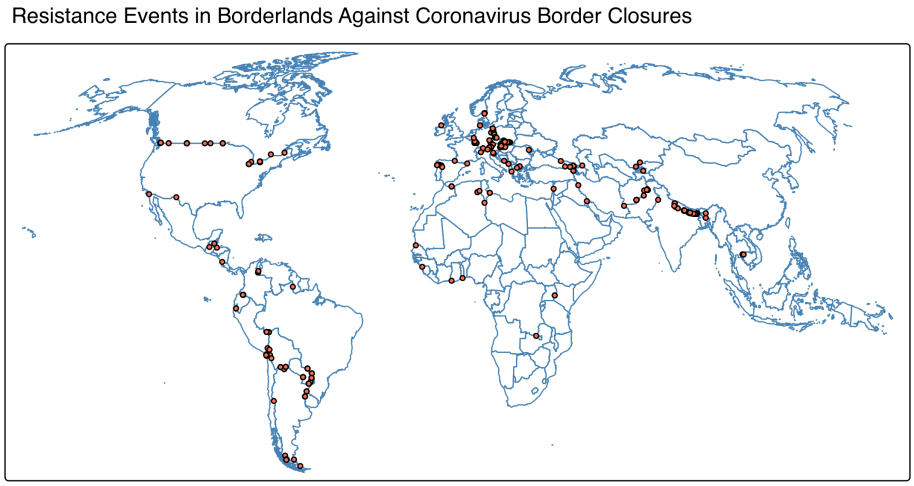
Scholars have identified biases in such media-sourced data concerning consistency and constancy of reporting both within and between contexts (Parkinson, 2024). Nevertheless, using the COVID-19 Disorder Tracker here has an advantage: demand by policymakers and publics for coverage of the pandemic was extremely high. This motivated broad data collection, as indicated by ACLED beginning to cover many countries for the first time during the pandemic, including throughout Europe, the U.S., some parts of Asia, and other regions.[3]

[3]Canada and Papau New Guinea were the only two countries with land borders whose coverage did not encompass the entire pandemic. See https://acleddata.com/knowledge-base/country-time-period-coverage/.

To measure Resistance, I extracted protest- and riot-type events and then used border-related keywords to identify 950 potentially relevant events.[4] I then hand-coded these events alongside undergraduate research assistants with a codebook to confirm relevance and position (see Appendix 10). The qualitative descriptions indicate that relevant events opposed to a border closures were generally driven by local concerns and led by people from these areas. For example: "... workers protested in Vinhais, demanding the Portuguese- Spanish border's reopening - closed to coronavirus-related restrictions."

The coding process identified 541 unique events about border closures between January 2020 and January 2023 across approximately 70 countries. As stated above, most political mobilization about closures (86%) took place within borderlands. Further, most of these events opposed (93%) rather than supported closures. The locations of opposed events in borderlands are shown in Figure 5.

Figure 5: Resistance Map



Sample and Models

To ensure that the sample is theoretically relevant, I include only community grid cells in borderlands affected by a border closure enacted by their own state. For communities not exposed to this policy, there was no closure for communities to potentially resist. Further, while the underlying theoretical logic might explain behavior by any community, the most meaningful chance for resistance against was against a community's own state. Being within the territorial domain of the state enacting a closure provided access to any relevant legal systems, to elites part of the political system, and to the physical places where enforcement happened.[5]

[4]The keywords included "[Bb]order*", "[Bb]oundar*", "[Cc]rossing*", "[Cc]heckpoint*", "[Ii]nternational [Bb]ridge*", and "[Ff]rontier*".

[5]Besides, there is extensive overlap between which side enacted a closure. Of borderland communities whose own state closed the border at some point during the pandemic, the vast majority

The COVID Border Accountability Project, which tracked the number and content of restrictions by all countries from 2020 to 2021 (Shiraef et al., 2022), indicates that 136 out of 152 countries with land borders (approximately 89%) closed them at least once during the pandemic. Limiting the sample to grid cells among these countries results in 61,902 observations (approximately 93% of the original sample). There is not evidence for the endogeneity concern that borderlands containing more transnational communities were more likely to experience a closure.[6]

Using the hand-coded resistance data, each grid cell is coded for whether at least one of those events transpired within the cell between 2020 and 2021. This aligns with the temporal scope of the closure data. 239 cells experienced one or more events, indicating that resistance was rare.

Resistance is modeled as a function of Transnationality and other variables in a series of logistic regression models. To account for unobserved confounding, the models variously include fixed effects for the borderland side in which the community cell is located (Models 1-2), borderland regardless of side (Models 3-4), and country (Models 5-6).[7] The inclusion of these fixed effects specifications is important because they account for the variety of unmeasured factors that plausibly affect the relationship between transnationality and resistance, such as the prevalence of COVID-19 and unique regional dynamics. To examine some of these factors more directly, however, I also conduct subgroup analyses concerning state capacity and regime type.

Further, all models also include a series of control variables. The first of these is a continuous variable for *Population* (Rose et al., 2020).[8] The next is a dichotomous variable for the presence of *Natural Resources* (Denly et al., 2022) because communities endowed with these might have a greater ability to mobilize in the first place. The third control is a continuous variable for terrain *Ruggedness* (Shaver, Carter and Shawa, 2019), which has been found to associate with contention in state-society relations.[9] The next control variable is a continuous variable for *Capital Distance* (Schvitz et al., 2022), a proxy for incorporation into the national polity because communities with stronger ties to the interior might be less susceptible to border-related shocks. Finally, additional specifications account for potential spatial spillover of Resistance by including a binary spatial lag *Proximate Event* indicating whether a resistance event occurred in an adjacent grid cell (Models 2, 4, and 6).

(91%) also experienced a closure by the neighboring state.

[6]There is little to no association between the average transnationality across all communities on a borderland side and exposure to a border closure ($\rho = 0$) or between the average transnationality of all communities across a country's borderlands and whether that country enacted a border closure ($\rho = -0.11$). This finding accords with work establishing that closures were driven by macro-level factors (Kenwick and Simmons, 2020).

[7]These specifications necessarily result in the models dropping observations from units that do not vary on the Resistance outcome. Appendix 7 presents an alternative linear probability modeling approach that yields substantively similar results.

[8]Transnationality has a very weak association with Population ($\rho = 0.07$), indicating that the measure is not simply reflecting community size.

[9]Addressing multicollinearity concerns, Transnationality and Ruggedness do not correlate ($\rho = -0.01$). Similarly, road connectivity and Ruggedness ($\rho = 0.02$) as well as railroad connectivity and Ruggedness ($\rho = -0.01$) do not correlate.

Finally, following established practice, all of the independent variables are rescaled (Gelman, 2008). Rescaling entailed de-meaning all variables and then, for continuous variables, dividing by two standard deviations. Each coefficient represents the change in the log odds of the outcome when the independent variable increases by two standard deviations.

Results

The expectation is that more transnational borderland communities were more likely than other borderland communities to resist coronavirus border closures. Overall, the results displayed in Table 1 indicate a positive association between Transnationality and Resistance. This finding supports the **Transnational Resistance Hypothesis**.

Table 1: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.47***	3.55***	3.27***	3.16***	1.54***	1.44***
	(0.25)	(0.26)	(0.23)	(0.24)	(0.17)	(0.17)
Population	0.56***	0.56***	0.31***	0.31***	0.24***	0.24***
	(0.10)	(0.10)	(0.07)	(0.07)	(0.06)	(0.06)
Natural Resources	1.12***	1.14***	1.23***	1.20***	1.52***	1.39***
	(0.30)	(0.30)	(0.27)	(0.28)	(0.27)	(0.28)
Ruggedness	−0.54***	−0.57***	−0.42**	−0.42**	−0.51***	−0.42**
	(0.21)	(0.21)	(0.20)	(0.20)	(0.17)	(0.17)
Capital Distance	0.56	0.54	−0.08	−0.05	−0.41	−0.39
	(0.67)	(0.67)	(0.36)	(0.36)	(0.42)	(0.42)
Proximate Event		−0.24		0.36**		0.95***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	15,998	15,998	22,015	22,015	30,454	30,454

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.

Across all models, Transnationality positively and significantly associates with Resistance. This result holds when accounting for time-invariant characteristics of the borderland side (Models 1), the borderland (Models 3), and country (Models 5). This result indicates that borderland communities exposed to a COVID-19 border closures were more likely to resist the policy when they were more transnational.

Additionally, the results from two of the models with the spatial lag Proximate Event are suggestive of a spatial diffusion process. When comparing communities on either side of the same borderland (Model 4) or in the same country (Model 6), resistance by a neighboring community predicts resistance by the focal community. This occurs alongside the independent influence of Transnationality, whose effect is

still positive and significant. However, there is not evidence for spatial diffusion in the model comparing communities of the same borderland side (Model 2).

For a substantive interpretation of the effects, Figure 6 displays the predicted probabilities of Resistance at different values of Transnationality, holding other covariates at observed values. Each sub-figure corresponds to one of the models without a spatial lag.[10] In each plot, moderately and highly transnational communities become meaningfully more likely to challenge coronavirus border closures.

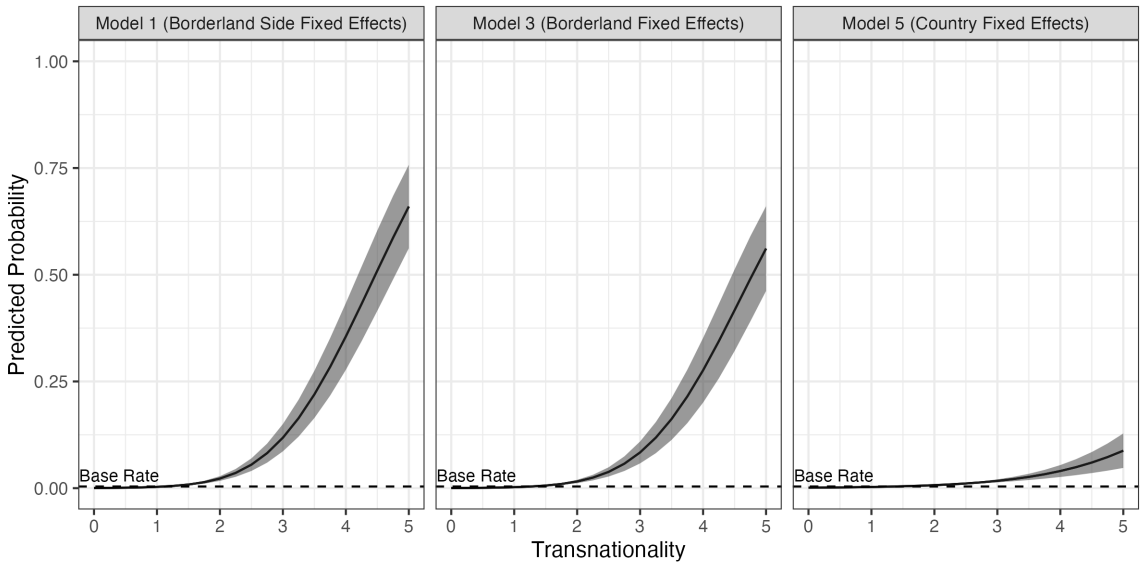


Figure 6: Predicted Probability of Resisting Coronavirus Border Closures

Across models, the predicted probability of resistance is effectively 0 for low transnationality, matching the low base rate of 0.004. However, the estimate begins to exceed the base rate when transnationality reaches a moderate value of approximately 2.5. For example, in Model 1 using borderland side fixed effects, the predicted probability of resistance when transnationality is 2.5 increases to 0.06 [95% CI: 0.04,0.07] and then at extremely high transnationality of 5 to 0.66 [95% CI: 0.56,0.76]. This is a drastic effect size, indicating that resistance by the most transnational communities is extremely more likely than it is for minimally transnational communities on the same borderland side. Similar results emerge from Model 3 including fixed effects for borderlands.

Notably, the effect size is smaller in Model 5 for country fixed effects. In this case, the predicted probability of resistance for highly transnational communities reaches 0.09 [95% CI: 0.05,0.13]. This magnitude is smaller than that predicted by the other models, suggesting that the influence of Transnationality is relatively more constrained by country-level factors. However, the effect size, which is about 900%, is still very meaningful given the very low base rate of resistance.

[10]For ease of interpretation, these quantities are derived from analogous models that use the non-rescaled versions of the variables.

A series of robustness checks reinforces the evidence for the relationship between Transnationality and Resistance. First, altering the Transnationality measure by using an alternative ordinalization scheme for the underlying items, by using different grid cell sizes to test for bias driven by the modifiable areal unit problem, and by removing the unique sister cities item yields substantively equivalent results (see Appendices 3, 4, 5, and 6). Second, the finding also holds when using linear probability models (see Appendix 7). This is an established alternative approach to modeling rare binary events data with fixed effects, as logit models necessarily drop observations from units that do not vary on the outcome (Timoneda, 2021). Finally, the key finding also holds in subgroup analyses by state capacity (see Appendix 8) and regime type (see Appendix 9).

Overall, the consistent results across different measurement and modeling approaches underscore the centrality of transnationality to local resistance against pandemic-era border hardening. In the absence of meaningful transnational ties, resistance essentially never took place. Transnationality was a key factor driving the resistance that transpired.

Qualitative Evidence

The evidence presented thus far points toward a relationship between the degree to which borderland communities are transnational and resistance against border hardening. Communities that were more transnational were more likely to resist COVID-19 pandemic border closures. This finding indicates that border hardening can be a point of tension between borderland communities and states, even when national perceptions are of an "obvious" threat necessitating restrictions.

However, there are exceptions to the pattern. For example, like many countries, the U.S. closed the border with Mexico for nearly two years during the pandemic (Department of Homeland Security, 2020; Federal Register, 2021). But no local protests/riots took place despite there being highly transnational U.S. communities in the area.

These outliers suggest limits to the theory. Why would highly transnational borderland communities facing restrictions not have taken political action? In other words, under what conditions does border hardening not result in conflict? I investigate this anomaly by collective qualitative evidence from within such communities. Investigating "deviant cases" (Levy, 2008) or "off-the-line" observations (Lieberman, 2005) is an established practice for assessing and in turn refining a theory. Explaining why the general theory does not hold in a particular context sheds light on the scope conditions of that theory.

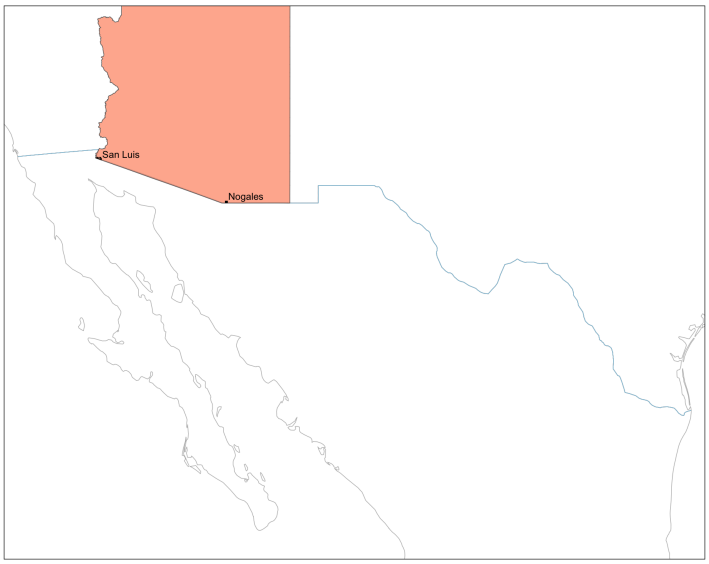
Cases and Interviewee Sampling

I examine Nogales and San Luis in Arizona, two small cities on the border with Mexico (see Figure 7), for two key reasons. First, they exemplify the cross-border connection that scholars have long recognized as characterizing much life in this borderland

(Martínez, 1994; Díaz-Barriga and Dorsey, 2020). The quantitative transnationality measure used above scores Nogales and San Luis as 3.75 and 4, respectively, on the 21-point scale ranging from 0 to 5. Therefore, investigating these communities makes it possible to learn about transnational communities more generally.

The second reason is that these borderland communities are in a high-capacity democracy in which they had the political opportunity to protest. This is another dimension on which the lack of resistance against the pandemic closure is especially puzzling. This contextual factor also means that the findings from this context can be reasonably generalized to other democratic settings, which is important given that many democracies are participating in the global trend toward border hardening.

Figure 7: Fieldwork Research Sites



To directly access the perspectives and knowledge of local stakeholders, I conducted semi-structured interviews. These took place during a three-week fieldwork trip across Nogales and San Luis, as well as Phoenix the state capitol and the nearby city of Yuma, in October-November 2024. The best sampling strategy was a mix of purposive and snowball sampling for individuals in public and private sectors with knowledge about and experience with border issues (Kapiszewski, 2015). This entailed identifying and contacting relevant individuals, sometimes with the assistance of an interlocutor at a border policy lobbying firm, as well as asking participants to suggest other interviewees.[11]

The sampling process produced an interview pool of 18 individuals across Nogales and San Luis as well as Yuma (see Table 2). Most work in local government,

[11]One concern is that insular social networks may have led to interviewees not reflecting the array of stakeholders in the communities. This concern is mitigated by two factors. First, the firm interlocutor who helped to arrange interviews worked with all public and private stakeholders across the communities. Second, in the course of the research, interviewees expressed a range of political affiliations and beliefs.

while others are members of the Greater Nogales Santa Cruz County Port Authority and the Greater Yuma Port Authority, businessowners,[12] and activists involved in humanitarian work with migrants or farmworkers.

Table 2: Interview Data Sample

Category	Number
Mayor	2
City Administration	2
City Council	1
Port Authority Member	6
County Supervisor	2
State Agency	1
State Congressperson (Former)	1
Businessperson	5
Activist	3

Note: Some individuals in the 18-person sample overlap multiple categories.

The semi-structured interviews entailed asking open-ended questions about various border issues from pre-written questionnaires while allowing for natural divergences in conversation. This approach generates comparable data across interviews yet permits unexpected topics and perspectives. The questionnaires that I used for government officials, businesspeople, and activists are shared in Appendix 11. See Appendix 12 for ethical considerations.

Findings

First, it is confirmed that Nogales and San Luis are highly transnational and that there were no public instances of resistance to pandemic-related border restrictions. Second, interviewees recounted decades of bottom-up work to advocate for their ports of entry in the face of deficiencies in federal/state border policy, which rules out inefficacy as an explanation for the lack of pandemic-era resistance. Third, the closure made exceptions for a substantial breadth of movement related to the local economy, minimizing the overall impact.

The takeaway is that state accommodations for key flows preempted discontent. The notion of selective bordering helps to explain this. Border control varies both within and across strategies. The more narrow the set of actors and flows a given strategy targets, the more selective it is. Comparatively selective bordering imposes fewer costs on local populations dependent on transnational interaction and exchange, forestalling a clash of interests.

[12]These include a shelter company for manufacturing in Mexico, a customs broker, a produce import/export company, and downtown retail stores.

We live, die, and breathe everything associated with the border

Confirming the case selection premise, the manner in which essentially every interviewee characterized local life reflects the concept of transnationality. They consistently chronicled facts and stories of deep and long-lasting cross-border ties. These were described as defining the communities throughout their histories.

The surrounding areas have long histories involving the presence of Native American groups and the arrival of Spanish colonists in the 16th century. In their modern forms, Nogales is the older community. The area became part of the U.S. via the Gadsden Purchase in 1853, after which a pair of Russian-Jewish immigrants opened a trading post in 1880. The first border rail crossing between the U.S. and Mexico was opened there in 1882, heralding the growth of Nogales as a city. San Luis was founded later in 1930 along with a port of entry to San Luis Río Colorado in Mexico. But San Luis was incorporated into Yuma County in 1979 after an explosion of growth through the border economy. Today, Nogales and San Luis number approximately 20,000 and 40,000, respectively. They neighbor the larger cities of Nogales and San Luis Rio Colorado in Sonora, Mexico. Both are more than 90% Hispanic (United States Census Bureau, N.d.). Nogales and the wider Santa Cruz County have together leaned strongly Democratic for the last century, while San Luis has been a Democratic stronghold in the heavily Republican Yuma County since the 1960s.[13]

The centrality of transnationality to local ways of life is exemplified by a long-time city government employee and official in Nogales remarking that "We live, die, and breathe everything associated with the border."[14] On the economic dimension, cross-border exchange is hugely significant in multiple ways. The first concerns downtown businesses. As the member of one longtime business family in Nogales related, many shops have existed for nearly 100 years primarily because of cross-border shoppers.[15] The U.S. communities are too small to comprise a sustainable customer base.

Second, the most significant source of government revenue for both cities is sales tax, which is generated predominantly by shoppers crossing from Mexico.[16] Some goods and services are cheaper on the U.S. side, which incentivizes people to cross over. The sales tax revenue from this activity is so significant that neither community has a property tax. Hence, in the words of a Port Authority member in Nogales, the community "needs the border" to survive.[17] Expressing a similar sentiment, another local official declared, "If the border wasn't here, you'd have nothing."[18]

Finally, a tremendous amount of international trade flows through the ports of both communities. For example, nearly $29 billion USD in imports and exports passed through Nogales in 2022 (Greater Nogales Santa Cruz County Port Authority, 2024). Interviewees consistently referred to such trade as critical, saying for example that

[13]Largely after the period in this study, the Republican Party under Donald Trump has made partial inroads with borderland communities especially in the 2024 elections.

[14]Interview 3, 10/28/2024.

[15]Interview 8, 10/31/2024.

[16]Interview 3, 10/28/2024; Interview 9, 11/01/2024; Interview 12, 11/05/2024; Interview 15, 11/07/2024.

[17]Interview 5, 10/29/2024.

[18]Interview 9, 11/01/2024.

"All of our existence supports or is related to cross-border trade."[19]

San Luis similarly depends on cross-border shoppers and trade.[20] However, it also has a substantial agriculture industry whose workforce consists primarily of *campesinos*, or Mexican seasonal and migrant farmworkers. A few thousand people cross over daily for much of the year to work locally or nearby in California.[21] The San Luis economy is "entirely dependent" on this labor.[22]

As for the social dimension of transnationality, interviewees consistently described their communities as part of a bifurcated yet collective social world. As one mayor put it, "We're the same people."[23] Nogales, Arizona, and Nogales, Sonora, in fact, are articulated as being part of a broader *Ambos Nogales* ("both Nogales").[24] Visiting family or friends is a common reason that people on either side cross the border.[25] These ties are a primary benefit that interviewees repeatedly ascribed to border proximity. They variously referred not only to economic gains but to "cultural benefits,"[26] "being binational,"[27] "culture and diversity,"[28] being "one community,"[29] a "culture of the border,"[30] and "cultural interconnectedness."[31]

Notably, transnationality is not new. Some interviewees' stories illustrate the centrality of the border to their communities over time. In Nogales, for example, it was once a regular occurrence for hundreds of children to enter the U.S. for Halloween and Christmas.[32] Both an official and an activist in San Luis recounted their grandparents or parents having once worked as *campesinos*.[33] These stories speak to the enduring nature of transnationality in the communities.

The information shared by interviewees confirms the case selection premise. First, Nogales and San Luis are highly transnational communities. Second, no resistance events occurred against the COVID-19 border closure.

Washington doesn't have a clue

Given their deep ties across the border, it remains surprising that Nogales and San Luis did not resist the COVID-19 border closure. One potential explanation is that the communities did not have the efficacy, perceived or tangible, to take action. Concern about punishment by the federal government, or the sense of being peripheral, may have dampened inclinations to mobilize.

[19] Interview 3, 10/28/2024.
[20] Interview 15, 11/07/2024.
[21] Interview 12, 11/05/2024; Interview 16, 11/07/2024.
[22] Interview 11, 11/04/2024.
[23] Interview 18, 11/20/2024.
[24] Interview 5, 10/29/2024; Interview 7, 10/31/2024.
[25] Interview 5, 10/29/2024.
[26] Interview 1, 10/24/2024.
[27] Interview 2, 10/25/2024.
[28] Interview 3, 10/28/2024
[29] Interview 8, 10/31/2024.
[30] Interview 13, 11/05/2024.
[31] Interview 15, 11/07/2024.
[32] Interview 2, 10/25/2024.
[33] Interview 16, 11/07/2024; Interview 18, 11/20/2024.

Officials and businesspeople did recount a series of difficulties that their communities had faced in having their interests and needs are sufficiently incorporated into border policy. However, rather than acquiesce, the communities have engaged in decades of lobbying and other activities to demand attention and funding. This history of proactive civil society and government action indicates that inefficacy is an unlikely explanation for the lack of resistance.

The port authorities in Nogales and San Luis demonstrate this point. These all-volunteer entities, comprised of community leaders, interface between local, state, and federal government authorities as well as fellow border communities in both the U.S. and Mexico about border policy and day-to-day management of the ports of entry. Their ultimate mission has been to shorten border crossing wait times by improving efficiency, which was repeatedly described as the most important border-related issue for the communities.[34] Efficiency necessitates suitable road infrastructure, consistent staffing by U.S. Customs and Border Protection, and advanced detection technologies.

However, according to local leaders, federal attention to these needs has severely lacked. Interviewees attributed this challenge to a physical and political distance between their communities and national authorities. Local communities are "not a priority" because "DC, and Mexico City for that matter, [are] far removed" from the border.[35] This underlies inattention and, when the federal government does initiate a project, it being "clumsy" and "reactive" rather than proactive.[36] "Washington", according to a former Congressperson of the area, "doesn't have a clue" about local life and "the symbiotic relationship[s]" among border communities.[37] The problem is "not local people, it's Washington D.C."[38]

Given this situation, local leaders created the port authorities to support their "forgotten" communities.[39] The first specific goal was to help local import-export businesses compete with firms in border communities elsewhere in the country that had already been receiving federal support for their own ports of entry.[40] The second, broader motivation was to better communicate local needs with state and national governments.[41] As put by one founding member of the Greater Nogales Port Authority, the community was "tired of Washington telling our story... what we need and what we don't need."[42] Another co-founder recounted that creating the port authority in late 2004 was "a way of having a voice," as "we all noticed that the state was making our decisions."[43]

These activities have included communicating with lawmakers and officials, hiring lobbyists, and developing the bureaucratic resources to apply for grants. Early

[34]Interview 3, 10/28/2024; Interview 5, 10/29/2024; Interview 8, 10/31/2024; Interview 9, 11/01/2024; Interview 11, 11/04/2024; Interview 12, 11/05/2024; Interview 15, 11/07/2024.
[35]Interview 15, 11/07/2024.
[36]Interview 17, 11/11/2024.
[37]Interview 13, 11/05/2024.
[38]Interview 9, 11/01/2024.
[39]Interview 1, 10/24/2024.
[40]Interview 9, 11/01/2024.
[41]Interview 5, 10/29/2024.
[42]Interview 1, 10/24/2024.
[43]Interview 2, 10/25/2024.

successes include the $250-million USD renovation of the Nogales-Mariposa Port of Entry in the 2010s and the construction of a new fully commercial port of entry in San Luis in the late 2000s. According to interviewees, such developments would not have happened without intensive bottom-up efforts.[44] Border communities are seen as having had to work proactively and collaboratively to improve their situation.[45] These initiatives were described as locally driven: the "vast majority of projects on the border are by local authorities... These solutions don't come from D.C. or Mexico City."[46]

These accounts speak to the strained relationships that Nogales and San Luis have had with higher-level authorities. They also reflect proactive engagement by the communities on border issues, expressing disagreement and demanding both attention and resources. Situating the pandemic in this historical context, it is unlikely that inefficacy explains the lack of mobilization against border restrictions.

We didn't slow down on the border

Why, then, did neither Nogales nor San Luis resist pandemic border hardening? The evidence points to the selective nature of the closure that was enacted. The primary restriction adopted by the U.S. at the border, starting on March 20, 2020, was to differentiate people by citizenship and, in turn, "essential"/"non-essential" status. Citizens were allowed to traverse the border as before, but non-citizens were differentiated by whether their movement was defined as essential or non-essential. Essential movement encompassed, among other reasons: work within the U.S., attending school in the U.S., and cross-border trade (American Immigration Council, 2020). Licit entry by non-citizens that was "considered tourism or recreational in nature", such as shopping and visiting family or friends, was disallowed (Department of Homeland Security, 2020).

This policy applied to the entirety of the border rather than to particular ports of entry. The motivation, as articulated by various federal officials, was to preserve the substantial amount of trade on which the U.S. economy relies (e.g., White House, 2020). The restrictions were repeatedly extended until November 20, 2021, when non-citizens could enter through border ports of entry so long as they provided proof of having been vaccinated for COVID-19 (Federal Register, 2021).

This closure policy had a variety of impacts on Nogales and San Luis, some of which were negative. First, the reduced customer base accompanying the ban on "tourist" travel did affect some downtown stores. This put financial strain on a merchant in Nogales, for instance, who reported that multiple other businesses in the area had to close down as a result.[47] Second, in San Luis, operating hours for the ports of entry did remain open at all times of the day, but the Mexico-side ports limited their hours in the evening. Mexican *campesinos* thus had to return from work at an

[44]Interview 1, 10/24/2024; Interview 2, 10/25/2024; Interview 3, 10/28/2024; Interview 12, 11/05/2024.
[45]Interview 11, 11/04/2024.
[46]Interview 17, 11/11/2024
[47]Interview 8, 10/31/24.

earlier time than usual, which was difficult given that some worked deep in Arizona or California, resulting in a period during which some workers were stranded overnight in San Luis and had to sleep outside.[48] Finally, social relations across the border were reportedly affected. It was striking, in the words of the Nogales downtown merchant, that "Visiting *family* was not deemed essential"; this type of policy produced a "very unnatural" period that was the "nail in the coffin" for social ties across the border.[49] Thus, the border closure did harm important features of transnational life.

The exceptions made for trade and workers, however, proved critical. According to multiple interviewees, the restrictions' economic impact on their communities was much more limited than expected because important flows from Mexico were still permitted. Key pillars of the transnational way of life continued. Put simply by one interviewee, "We didn't slow down on the border."[50]

Multiple interviewees reported that local operations continued to a substantial degree. In the striking words of one of the community's mayors, the border restrictions "hardly affected our economy... Trade kept going."[51] A city administration official in Nogales similarly reported that the overall economic situation remained roughly the same since industries involving the border could still operate.[52] As for San Luis, a city administration official characterized the category of essential workers as "relatively broad", noting that it encompassed agricultural workers.[53]

Both city administration officials recounted great relief at their communities not crumbling due to the restrictions like they had expected.[54] Multiple interviewees also emphasized that tax revenue remained relatively constant. Both communities experienced a temporary dip in sales tax revenue, but this went back to normal levels quickly. Interviewees variously attributed this outcome to U.S.-side shoppers being forced to do their usually cross-border shopping within their community, to shopping done by the workers and others still crossing, or to U.S. shoppers acquiring goods for family and friends in Mexico.[55]

Refining the Theory with Selective Bordering

Overall, the interview findings from these deviant cases are useful for refining the theory of how local communities react to border hardening. The core logic still holds: the degree to which a community is transnational shapes prevailing interests concerning border control. Highly transnational communities have citizens and elites who are broadly vested in policies that facilitate economic and social flows across the border. Broadly speaking, such communities may oppose and resist new hardening

[48]Interview 15 11/07/2024.
[49]Interview 8, 10/31/24.
[50]Interview 17, 11/11/2024.
[51]Interview 18, 11/20/2024.
[52]Interview 3, 10/28/2024.
[53]Interview 12, 11/05/2024.
[54]Interview 3, 10/28/2024; Interview 12, 11/05/2024.
[55]Interview 3, 10/28/2024; Interview 12, 11/05/2024; Interview 17, 11/11/2024; Interview 18, 11/20/2024.

efforts. This phenomenon was observed in the quantitative analysis of all borderland communities exposed to border closures during the pandemic.

However, the first inductive lesson from the case studies is that transnational communities will not necessarily oppose any and all forms of border hardening. This is because the impact of hardening on local communities is conditional, recent work on anti-smuggling enforcement and walling (Kim and Tajima, 2022; Linebarger and Braithwaite, 2020). The extent to which it disrupts local ways of life depends on exactly which actors and flows are targeted. This conditionality will manifest within and across different forms of border hardening.

For example, total border closures during the pandemic that blocked trade and other licit economic flows directly threatened transnational communities dependent on this kind of mobility. But when a closure was accompanied by meaningful exceptions, as shown here for the U.S.–Mexico borderland, the impact was relatively diminished. Nogales and San Luis did experience costs from the closure, but these were not severe enough to spark mobilization against the closure.

It is possible that the economic dimension of transnationality holds more sway over local reactions than the social dimension. This could be because key influential elites in borderland communities, like officials and business owners, are more concerned about economic issues. Or the existence of an imminent threat, such as a virus or security concern, may generate acceptance of certain restrictions even if these are harmful in other respects like against social life. Fundamentally, people in borderland communities face tradeoffs when it comes to border control. The threat of border hardening to transnational communities' interests is a question rather than given.

Building on this discussion, local contestation over border hardening is not inevitable. The scope condition for the theory on transnationality and resistance is that the hardening measure in question specifically restricts the movement of actors involved in contextually relevant transnational flows. Selective bordering, in which a control strategy is scoped in its targets, is less likely to fuel discontent because it accommodates key interests. Selectivity allows key aspects of transnationality to remain intact in the context of a changing border.

This point invites the question of states' choices: if selective bordering avoids pushback, why not always be selective? First, state actors may simply not care about local concerns. The incentives for hardening may override the weight of local communities' preferences, especially when they are peripheral in the political system. Second, states may not sufficiently understand local interests in the first place because of uneven state capacity. Legibility may increase as a result of hardening (Blair, 2024), but this is distinct from the initial decision to harden a border. Finally, supporting local communities via selectivity may not be the explicit goal. The COVID-19 border closure adopted by the U.S. followed higher-order concerns about the national economy. Transnational communities may benefit from such exceptions simply as a fortuitous outcome.

Conclusion

States are increasingly endeavoring to display and exert greater control over movement at borders. Scholars have uncovered important top-down aspects of this politically salient phenomenon, yet the position of local communities is understudied. This study advances a framework for theorizing the borderland as a unique geopolitical space.

Compared to country interiors, communities in border spaces have the unique opportunity to engage with people, goods, cultures, and institutions across the border. Transnational ties alter political incentives, generating support for policies that sustain interaction and exchange across the border. In the face of disruptive border hardening, conflict may emerge as transnational communities challenge the state. However, if hardening is calibrated in its targets and thus accommodates transnational communities' interests, conflict is less likely to emerge.

I demonstrate that these dynamics transpired over border closures during the coronavirus pandemic. The global quantitative analysis showed that substantial localized opposition took place against closures and that transnationality played a key explanatory role. Fieldwork interviews conducted in the deviant cases of Nogales and San Luis in the U.S. near Mexico uncovers the phenomenon of selective bordering, which reduces the potential for conflict to emerge over border hardening.

This study empirically focused on the coronavirus pandemic context but speaks to border politics more generally. The borderland is a unique geopolitical space that deserves more attention from scholars and policymakers. Distinct processes play out in this setting, with substantial variation characterizing how local populations are oriented toward the border. This suggests that local contestation, driven by transnationality, may characterize the politics of border hardening to a much greater extent than previous work recognizes or can explain. Yet, as indicated by the findings about selective bordering, central governments hardening borders that wish to mitigate backlash from highly transnational communities can build in transparent and predictable exceptions for locally salient flows.

In that vein, this study opens up new areas of inquiry. One natural direction concerns how these dynamics travel across other forms of border hardening. Relatedly, under what conditions do states make accommodations, intentionally or unintentionally, for transnationality? More broadly, does resistance impact the "success" of the salient and expensive border hardening projects proliferating across the world?

To pursue these questions, the border politics community would benefit from adopting a broad array of data sources and methodologies. Along with macro-level analyses, evidence like interviews with stakeholders in borderlands and national officials can provide granular insight into micro-level processes associated with bordering. Overall, dedicating more theoretical and empirical attention to the politics of borders *within* border spaces will help to broaden knowledge on some of the most pressing issues of our time.

References

Adcock, Robert and David Collier. 2001. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *The American Political Science Review* 95(3):529–546.

Agbiboa, Daniel E. 2017. "Borders That Continue to Bother Us: The Politics of Cross-Border Security Cooperation in Africa's Lake Chad Basin." *Commonwealth & Comparative Politics* 55(4):403–425.

Aker, Jenny C., Michael W. Klein, Stephen A. O'Connell and Muzhe Yang. 2014. "Borders, Ethnicity and Trade." *Journal of Development Economics* 107:1–16.

American Immigration Council. 2020. "The Impact of COVID-19 on Noncitizens and Across the U.S. Immigration System." https://www.americanimmigrationcouncil.org/research/impact-covid-19-us-immigration-system.

Anderson, Benedict. 2006. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso.

Andreas, Peter. 2010. *Border Games: Policing the U.S.-Mexico Divide*. Cornell University Press.

Armed Conflict Location & Event Data Project. 2025. "COVID-19 Disorder Tracker." https://acleddata.com/analysis/covid-19-disorder-tracker/.

Avdan, Nazli. 2018. *Visas and Walls: Border Security in the Age of Terrorism*. University of Pennsylvania Press.

Avdan, Nazli and Christopher F. Gelpi. 2017. "Do Good Fences Make Good Neighbors? Border Barriers and the Transnational Flow of Terrorist Violence." *International Studies Quarterly* 61:14–27.

Baud, Michiel and Willem van Schendel. 1997. "Toward a Comparative History of Borderlands." *Journal of World History* 8(2):211–242.

Blair, Christopher W. 2023. "The Fortification Dilemma: Border Control and Rebel Violence." *American Journal of Political Science* .

Blair, Christopher W. 2024. "Border Fortification and Legibility: Evidence from Afghanistan." *American Journal of Political Science* n/a(n/a).

Branch, Jordan. 2014. *The Cartographic State: Maps, Territory, and the Origins of Sovereignty*. Cambridge University Press.

Braun, Robert and Otto Kienitz. 2022. "Comparative Politics in Borderlands: Actors, Identities, and Strategies." *Annual Review of Political Science* 25(1):13.1–13.19.

Bricker, Darrell. 2020. "Majority of People Want Borders Closed as Fear about COVID-19 Escalates." *Ipsos* .

Brown, Wendy. 2010. *Walled States, Waning Sovereignty.* Princeton University Press.

Campbell, Eugene and Jonathan Crush. 2015. "'They Don't Want Foreigners': Zimbabwean Migration and the Rise of Xenophobia in Botswana." *Crossings: Journal of Migration & Culture* 6(2):159–180.

Campbell, Eugene K. 2003. "Attitudes of Botswana Citizens toward Immigrants: Signs of Xenophobia?" *International Migration* 41(4):71–111.

Carter, David B, Bailee Donahue and Rob Williams. 2024. "Border Barriers and Illicit Trade Flows." *International Studies Quarterly* 68(3):sqae094.

Carter, David B. and Paul Poast. 2017. "Why Do States Build Walls? Political Economy, Security, and Border Stability." *Journal of Conflict Resolution* 61(2):239–270.

Carter, David B. and Paul Poast. 2020. "Barriers to Trade: How Border Walls Affect Trade Relations." *International Organization* pp. 1–21.

Castañeda Pérez, Estefania. 2020. "Transborder (in)Securities: Transborder Commuters' Perceptions of U.S. Customs and Border Protection Policing at the Mexico–U.S. Border." *Politics, Groups, and Identities* 0(0):1–20.

Chilton, Adam, Kevin L. Cope, Charles Crabtree and Mila Versteeg. 2023. "Support for Constitutional Rights During Crisis: Evidence from the Pandemic.".

Cortina, Jeronimo. 2019. "From a Distance: Geographic Proximity, Partisanship, and Public Attitudes toward the U.S.–Mexico Border Wall." *Political Research Quarterly* 73(3):740–754.

Cremer, Rolf D., Anne de Bruin and Ann Dupuis. 2001. "International Sister-Cities: Bridging the Global-Local Divide." *The American Journal of Economics and Sociology* 60(1):377–401.

Dear, Michael. 2020. Whose Borderland? What Evidence? Divergent Interests and the Impact of the US-México Wall. In *Walling In and Walling Out: Why Are We Building New Barriers to Divide Us?*, ed. Laura McAtackney and Randall H. McGuire. University of New Mexico Press.

Denly, Michael, Michael G. Findley, Joelean Hall, Andrew Stravers and James Igoe Walsh. 2022. "Do Natural Resources Really Cause Civil Conflict? Evidence from the New Global Resources Dataset." *Journal of Conflict Resolution* 66(3):387–412.

Department of Homeland Security. 2020. "Joint Statement on US-Mexico Joint Initiative to Combat the COVID-19 Pandemic." https://www.dhs.gov/archive/news/2020/03/20/joint-statement-us-mexico-joint-initiative-combat-covid-19-pandemic.

Deutschmann, Emanuel, Lorenzo Gabrielli and Ettore Recchi. 2023. "Roads, Rails, and Checkpoints: Assessing the Permeability of Nation-State Borders Worldwide." *World Development* 164:106175.

Díaz-Barriga, Miguel and Margaret E. Dorsey. 2020. *Fencing in Democracy: Border Walls, Necrocitizenship, and the Security State*. Duke University Press Books.

Diener, Alexander C. and Joshua Hagen. 2012. *Borders: A Very Short Introduction*. Oxford University Press.

Federal Register. 2021. "Notification of the Lifting of Temporary Travel Restrictions Applicable to Land Ports of Entry and Ferries Service Between the United States and Mexico for Certain Individuals Who Are Fully Vaccinated Against COVID-19 and Can Present Proof of COVID-19 Vaccination Status." https://www.federalregister.gov/documents/2021/12/23/2021-28064/notification-of-the-lifting-of-temporary-travel-restrictions-applicable-to-land-ports-of-entry-and.

Gallien, Max. 2020. "Informal Institutions and the Regulation of Smuggling in North Africa." *Perspectives on Politics* 18(2):492–508.

Garfias, Francisco and Emily A. Sellars. 2022. "When State Building Backfires: Elite Coordination and Popular Grievance in Rebellion." *American Journal of Political Science* 66(4):977–992.

Gavrilis, George. 2008. *The Dynamics of Interstate Boundaries*. Cambridge University Press.

Gelman, Andrew. 2008. "Scaling Regression Inputs by Dividing by Two Standard Deviations." *Statistics in Medicine* 27(15):2865–2873.

Getmanski, Anne, Guy Grossman and Austin L. Wright. 2019. "Border Walls and Smuggling Spillovers." *Quarterly Journal of Political Science* 14:329–347.

Ghosh, Sahana. 2011. "Cross-Border Activities in Everyday Life: The Bengal Borderland." *Contemporary South Asia* 19(1):49–60.

Gleditsch, Kristian Skrede. 2017. Civil War from a Transnational Perspective. In *Oxford Research Encyclopedia of Politics*.

Greater Nogales Santa Cruz County Port Authority. 2024. "Ports." https://www.nogalesport.org/ports.

Hale, Thomas, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, Emily Cameron-Blake, Laura Hallas, Saptarshi Majumdar and Helen Tatlow. 2021. "A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)." *Nature Human Behaviour* 5(4):529–538.

Hassner, Ron E. and Jason Wittenberg. 2015. "Barriers to Entry: Who Builds Fortified Boundaries and Why?" *International Security* 40(1):157–190.

Herre, Bastian. 2021. "The 'Regimes of the World' Data: How Do Researchers Measure Democracy?" *Our World in Data* .

Hu, Tianyou, Siddharth Natarajan and Andrew Delios. 2021. "Sister Cities, Cross-National FDI, and the Subnational FDI Location Decision." *Journal of International Business Studies* 52(7):1279–1301.

Idler, Annette. 2019. *Borderland Battles: Violence, Crime, and Governance at the Edges of Colombia's War*. Oxford University Press.

Jensen, J. Bradford, Dennis P. Quinn and Stephen Weymouth. 2017/ed. "Winners and Losers in International Trade: The Effects on US Presidential Voting." *International Organization* 71(3):423–457.

Kaltenbrunner, Andreas, Pablo Aragón, David Laniado and Yana Volkovich. 2014. Not All Paths Lead to Rome: Analysing the Network of Sister Cities. In *Self-Organizing Systems*, ed. Wilfried Elmenreich, Falko Dressler and Vittorio Loreto. Lecture Notes in Computer Science Berlin, Heidelberg: Springer pp. 151–156.

Kapiszewski, Diana. 2015. *Field Research in Political Science: Practices and Principles*. Strategies for Social Inquiry Cambridge, England: Cambridge University Press.

Kenwick, Michael, Junghyun Lim, Skyler Crane, Scott Wehrwein and Beth A. Simmons. 2025. "Estimating the Legibility of International Borders." *Proceedings of the National Academy of Sciences* 122(6):e2417812122.

Kenwick, Michael R. and Beth A. Simmons. 2020. "Pandemic Response as Border Politics." *International Organization* pp. 1–23.

Kenwick, Michael R, Beth A Simmons and Richard J McAlexander. 2023. "Infrastructure and Authority at the State's Edge: The Border Crossings of the World Dataset." *Journal of Peace Research* p. 00223433221145582.

Kim, Diana and Yuhki Tajima. 2022. "Smuggling and Border Enforcement." *International Organization* pp. 1–38.

Kummu, Matti, Maija Taka and Joseph H. A. Guillaume. 2018. "Gridded Global Datasets for Gross Domestic Product and Human Development Index over 1990–2015." *Scientific Data* 5(1):180004.

Lamarque, Hugh. 2023. "Where Are the Borderlands?" https://www.aborne.net/afrigos-african-governance-and-space/2023/9/29/where-are-the-borderlands.

Levitt, Peggy and B. Nadya Jaworsky. 2007. "Transnational Migration Studies: Past Developments and Future Trends." *Annual Review of Sociology* 33(Volume 33, 2007):129–156.

Levy, Jack S. 2008. "Case Studies: Types, Designs, and Logics of Inference." *Conflict Management and Peace Science* 25(1):1–18.

Lieberman, Evan S. 2005. "Nested Analysis as a Mixed-Method Strategy for Comparative Research." *The American Political Science Review* 99(3):435–452.

Lindholt, Marie Fly, Frederik Jørgensen, Alexander Bor and Michael Bang Petersen. 2021. "Support for Border Security during the COVID-19 Pandemic: Evidence on Levels and Predictors from Eight Western Democracies in 2020." *Journal of Elections, Public Opinion and Parties* 31(sup1):1–14.

Linebarger, Christopher and Alex Braithwaite. 2020. "Do Walls Work? The Effectiveness of Border Barriers in Containing the Cross-Border Spread of Violent Militancy." *International Studies Quarterly* .

Linebarger, Christopher and Alex Braithwaite. 2022. "Why Do Leaders Build Walls? Domestic Politics, Leader Survival, and The Fortification of Borders." *Journal of Conflict Resolution* p. 00220027211066615.

Longo, Matthew. 2017. *The Politics of Borders: Sovereignty, Security, and the Citizen after 9/11*. Cambridge University Press.

Markusse, Jan D. 2011. National Minorities in European Border Regions. In *The Routledge Research Companion to Border Studies*, ed. Doris Wastl-Walter.

Martínez, Oscar J. 1994. The Dynamics of Border Interaction: New Approaches to Border Analysis. In *Global Boundaries: World Boundaries Volume 1*, ed. Clive H. Schofield. London: Routledge pp. 1–15.

Matanzima, Joshua, Kirk Helliker and Nedson Pophiwa. 2023. Borders, Borderlands and Borderlanders. In *Lived Experiences of Borderland Communities in Zimbabwe: Livelihoods, Conservation, War and Covid-19*, ed. Nedson Pophiwa, Joshua Matanzima and Kirk Helliker. Springer Geography Cham: Springer International Publishing pp. 1–25.

McAdam, Doug. 2017. "Social Movement Theory and the Prospects for Climate Change Activism in the United States." *Annual Review of Political Science* 20(1):189–208.

McNamee, Lachlan and Anna Zhang. 2019. "Demographic Engineering and International Conflict: Evidence from China and the Former USSR." *International Organization* 73(2):291–327.

Meijer, Johan R, Mark A J Huijbregts, Kees C G J Schotten and Aafke M Schipper. 2018. "Global Patterns of Current and Future Road Infrastructure." *Environmental Research Letters* .

Miggelbrink, Judith. 2014. Crossing Lines, Crossed by Lines: Everyday Practices and Local Border Traffic in Schengen Regulated Borderlands. In *Placing the Border in Everyday Life*. Routledge.

Mirwaldt, Katja. 2010. "Contact, Conflict and Geography: What Factors Shape Cross-Border Citizen Relations?" *Political Geography* 29(8):434–443.

Moyo, Inocent. 2016. "The Beitbridge–Mussina Interface: Towards Flexible Citizenship, Sovereignty and Territoriality at the Border." *Journal of Borderlands Studies* 31(4):427–440.

Müller-Crepon, Carl, Guy Schvitz and Lars-Erik Cederman. 2024. "Shaping States into Nations: The Effects of Ethnic Geography on State Borders." *American Journal of Political Science* .

Müller-Crepon, Carl, Guy Schvitz and Lars-Erik Cederman. 2025. ""Right-Peopling" the State: Nationalism, Historical Legacies, and Ethnic Cleansing in Europe, 1886-2020." *Journal of Conflict Resolution* 69(2-3):211–241.

Musoni, Francis. 2020. *Border Jumping and Migration Control in Southern Africa*. Indiana University Press.

Natural Earth. 2017. "Railroads Version 4.0.0." https://www.naturalearthdata.com/downloads/10m-cultural-vectors/railroads/.

Open Source Routing Machine. N.d. "Project OSRM." https://project-osrm.org/.

Parellada, Cristian, Mario Carretero and María Rodríguez-Moneo. 2021. "Historical Borders and Maps as Symbolic Supports to Master Narratives and History Education." *Theory & Psychology* 31(5):763–779.

Parkinson, Sarah E. 2024. "Unreported Realities: The Political Economy of Media-Sourced Data." *American Political Science Review* 118(3):1527–1532.

Rose, Amy, Jacob McKee, Kelly Sims, Edward Bright, Andrew Reith and Marie Urban. 2020. "LandScan Global 2019.".

Sahlins, Peter. 1989. *Boundaries: The Making of France and Spain in the Pyrenees*. University of California Press.

Schon, Justin and David Leblang. 2021. "Why Physical Barriers Backfire: How Immigration Enforcement Deters Return and Increases Asylum Applications." *Comparative Political Studies* 54(14):2611–2652.

Schvitz, Guy, Luc Girardin, Seraina Rüegger, Nils B. Weidmann, Lars-Erik Cederman and Kristian Skrede Gleditsch. 2022. "Mapping the International System, 1886-2019: The CShapes 2.0 Dataset." *Journal of Conflict Resolution* 66(1):144–161.

Shaver, Andrew, David B. Carter and Tsering Wangyal Shawa. 2019. "Terrain Ruggedness and Land Cover: Improved Data for Most Research Designs." *Conflict Management and Peace Science* 36(2):191–218.

Shiraef, Mary A., Paul Friesen, Lukas Feddern and Mark A. Weiss. 2022. "Did Border Closures Slow SARS-CoV-2?" *Scientific Reports* 12(1):1709.

Simmons, Beth A. and Hein E. Goemans. 2021. "Built on Borders: Tensions with the Institution Liberalism (Thought It) Left Behind." *International Organization* pp. 1–24.

Simmons, Beth A. and Michael R Kenwick. 2022. "Border Orientation in a Globalizing World." *American Journal of Political Science* 66(4):853–870.

Simmons, Beth A. and Robert Shaffer. 2024. "Border Anxiety in International Discourse." *American Journal of Political Science* 68(2):661–677.

Sims, Kelly, Andrew Reith, Edward Bright, Jacob McKee and Amy Rose. 2022. "LandScan Global 2021 [Data Set].".

Stea, David, Jamie Zech and Melissa Gray. 2010. Change and Non-change in the U.S.-Mexican Borderlands after NAFTA. In *Understanding Life in the Borderlands: Boundaries in Depth and in Motion*, ed. I. William Zartman. University of Georgia Press.

Su, Xiaobo. 2022. "Smuggling and the Exercise of Effective Sovereignty at the China-Myanmar Border." *Review of International Political Economy* 29(4):1135–1158.

Tarrow, Sidney G. 2011. *Power in Movement: Social Movements and Contentious Politics*. Cambridge University Press.

The New Humanitarian. 2005. "With xenophobia rising, electrified border fence hailed." *The New Humanitarian* .

Timoneda, Joan C. 2021. "Estimating Group Fixed Effects in Panel Data with a Binary Dependent Variable: How the LPM Outperforms Logistic Regression in Rare Events Data." *Social Science Research* 93:102486.

United States Census Bureau. N.d. "Decennial Census P.L. 94-171 Redistricting Data." https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html.

Uttal, David H. 2000. "Seeing the Big Picture: Map Use and the Development of Spatial Cognition." *Developmental Science* 3(3):247–264.

Vogt, Manuel, Nils-Christian Bormann, Seraina Rüegger, Lars-Erik Cederman, Philipp Hunziker and Luc Girardin. 2015. "Integrating Data on Ethnicity, Geography, and Conflict: The Ethnic Power Relations Data Set Family." *Journal of Conflict Resolution* 59(7):1327–1342.

Whitaker, Beth. 2023. "Border Proximity and Attitudes toward Free Movement in Africa." *Afrobarometer* (Working Paper 200).

White House. 2020. "President Donald J. Trump Is Taking Necessary Safety Measures at the Border to Prevent Further Spread of the Coronavirus – The White House." https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-taking-necessary-safety-measures-border-prevent-spread-coronavirus/?utm_source=chatgpt.com.

Wilson, Thomas M. and Hastings Donnan. 1998. Nation, State and Identity at International Borders. In *Border Identities: Nation and State at International Frontiers*, ed. Hastings Donnan and Thomas M. Wilson. Cambridge: Cambridge University Press pp. 1–30.

Ying, Luwei. 2021. "How State Presence Leads to Civil Conflict." *Journal of Conflict Resolution* 65(2-3):506–533.

Appendix

Contents

1 Details on Measuring Transnationality

The measure of Transnationality that I use is geospatial and cross-sectional. The first task was to establish where borderlands are, which is difficult because perceptions of them are socially constructed across locales. One option is administrative districts contiguous with borders, but variation in their size and number is shaped by political factors. I opt to treat borderlands as zones within a standardized distance of a border, which is not influenced by politics. I started this step by generating all contemporary international land borders as the lines where country shapes intersect, using the CShapes 2.0 dataset (Schvitz et al., 2022). Borderlands were then generated with round-ended buffers as landmass areas within 50 miles, or approximately 80 kilometers (KM), of borderlines.[56] I then split each borderland shape into two sides based on the borderline, which generated 612 unique shapes.

Communities in borderlands are the primary unit of analysis, yet there is no obvious way to identify them. Using officially designated settlements or subnational districts potentially introduces bias. I opt to use the grid cell, which is unaffected by politics, to approximate human communities. Overlaying the borderland side shapes with rasterized population data from LandScan divided each borderland side into 1x1 KM grid cells (Rose et al., 2020). Only cells containing more than one person are included since, by definition, transnationality cannot characterize a place without groups of people.

The ideal type of information for measuring the relative transnationality of these communities would be hyper-local and time-varying data on the frequency and direction of all flows across all parts of all borders for local residents, licit trade, and illicit smuggling, as well as granular information on local identities over time. Such data, however, simply does not exist at a global scale. The next best measurement approach is to identify, per community grid cell, its proximity to observable phenomena that somehow reflect local variation in exchange and interaction across borders. The four items described below are chosen because they indicate economic and/or social interconnection for local communities as well as because global, geolocated information on them are available. I aggregate information for each community cell on the physical distance between its centroid and the items in order to score each community cell on the Transnationality scale.

The first item is road connectivity. Roads are sites of infrastructural connection that facilitate the movement of both people and goods, so communities that are closer to a border-reaching road can be treated as more transnational in both economic and social terms. I use the Global Roads Inventory Project to extract the 17,948 roads that intersect borders (Meijer et al., 2018). This dataset plausibly captures diverse forms of traffic across borders because it encompasses different types of roads, ranging from highways to local roads.[57] I then calculate the distance from each cell to the

[56] This approach cannot account for contextual conceptions, but the 50-mile zone does provide a consistent means of capturing all areas in the world that are reasonably proximate to borders.

[57] The dataset harmonizes information from numerous sources to capture all documented roads that existed by 2015. The data does contain information on road type, but I treat all types equally in my measurement because applying universal categories across diverse settings is problematic,

nearest border-associated road.

The next item is railroad connectivity. As with roads, the presence of a railroad indicates the infrastructure for the movement of people and goods between distant places. Railroads are especially useful for capturing where international trade is taking place, which can involve nearby communities in the economic exchange. I use Natural Earth data to extract the 537 railroads that geographically intersect borders (Natural Earth, 2017). I then calculate how far each grid cell is from the nearest railroad intersecting the border with which that cell is associated.

The third item is ethnic kin, which more directly captures the social dimension of transnationality compared to infrastructure. A large body of scholarship has found important effects of ethnic groups extending across political borders. For example, enduring forms of exchange can emerge since shared ethnic identity reduces the transaction costs of cross-border trade (Aker et al., 2014). In the domain of conflict, nonstate groups having ethnic support bases across borders influences the dynamics of civil wars (Gleditsch, 2017). Building on these findings, I treat borderland communities that are closer to an ethnic homeland that extends across a border as more transnational.[58] The data source is the Ethnic Power Relations-Transborder Ethnic Kin (EPR-TEK 2021) dataset, which contains shapes representing the historic settlement homelands of ethnic groups (Vogt et al., 2015). This dataset also provides an identifier for the broader TEK unit to which a group belongs, as some groups fall under a larger umbrella. I calculate the distance from each community cell to the nearest part of a TEK shape, if there is one extending across the relevant border, that is on that cell's side of the borderland.[59]

The final item is "sister cities." These are pairs of human settlements that officially engage in substantive economic and/or cultural exchange such as the import/export of local goods, tourism, and student programs. Identifying sister cities in borderlands is useful for capturing meaningful bottom-up interaction and exchange that takes place directly between communities. Modern people-to-people diplomacy via sister cities emerged in Europe as a post-World War Two reconciliation effort but has since spread worldwide (Cremer, de Bruin and Dupuis, 2001), fulfilling important functions such as attracting foreign direct investment (Hu, Natarajan and Delios, 2021). While many sister city pairings exist between non-bordering countries, it is a common phenomenon for interconnected communities separated by a border to establish this type of designation. Borderland communities with or proximate to a cross-border sister city pairing can thus be treated as more transnational. I operationalize sister cities using a previously webscraped list of 15,225 geolocated sister city pairs gathered from Wikipedia (Kaltenbrunner et al., 2014).[60] I calculate

especially when the qualities of roads themselves change over time in ways that may not be reflected in the type classifications.

[58]Treating ethnic homelands as a manifestation of transnationality by no means suggests that there are spaces where people do or do not "truly" belong or that all individuals in such areas hold identical identities.

[59]I use the TEK identifiers to aggregate individual group shapes into 167 TEK shapes.

[60]To my knowledge, there is no other global dataset on sister city pairings. The original data source is English Wikipedia, which potentially has biased regional coverage favoring English-speaking

the distance of each cell to the nearest sister city on its side of the border that is paired across that border.[61]

Combining the four items yields 612 raster grids, one per borderland side, with information on the distance from each cell to transnationality-relevant roads, ethnic homelands, railroads, and sister cities. To better ensure that the measure captures meaningful differences between neighboring cells, I aggregate cell size from 1x1 KM to 30x30 KM.[62] The end result is 66,682 grid cell observations. Note that using an alternative grid cell size of either 20x20 KM or 40x40 KM, motivated by concern about the modifiable areal unit problem, yields substantively similar results for all of the analyses presented in this study (see Appendices 4 and 5).

I then combine the items into an additive index measuring Transnationality per cell.[63] Constructing the additive index first involves converting all of the raw distance values into an ordinal scale, with larger values indicating closer proximity.[64] Using an ordinal rather than continuous measure of distance is necessary given that communities on the side of a borderland with no item present thus have no meaningful distance from that item.[65] After ordinalization, I score each cell by summing its values across the four items. To ease interpretation along the lines of the original ordinal items, I divide these summed values by the number of items (four). The final output is a scale with 21 unique values ranging between 0 (low transnationality, indicated by the absence of all items) and 5 (high transnationality, indicated by very close proximity to all items). The final values thus score each community grid cell on its relative level of transnationality. It is worth noting that each individual

Western countries. However, the dataset does capture sister cities across 209 countries, suggesting wide coverage. These include, for example, Russia, Guatemala, Venezuela, India, Japan, Liberia, and Papua New Guinea.

[61]There are 3396 sister cities that are part of a pairing in which at least one member is located within a borderland.

[62]I choose this size because 30 KM is considered the distance that an able-bodied person can reasonably walk twice in a day as part of a roundtrip (Lamarque, 2023). This does not capture walkability for every person in every setting. But, for the purposes of a global measure, 30 KM is a useful reference point for capturing the extent of space over which people could reasonably reach each other. The aggregation function for the distance measures takes, per item, the mean distance of each cell set being aggregated.

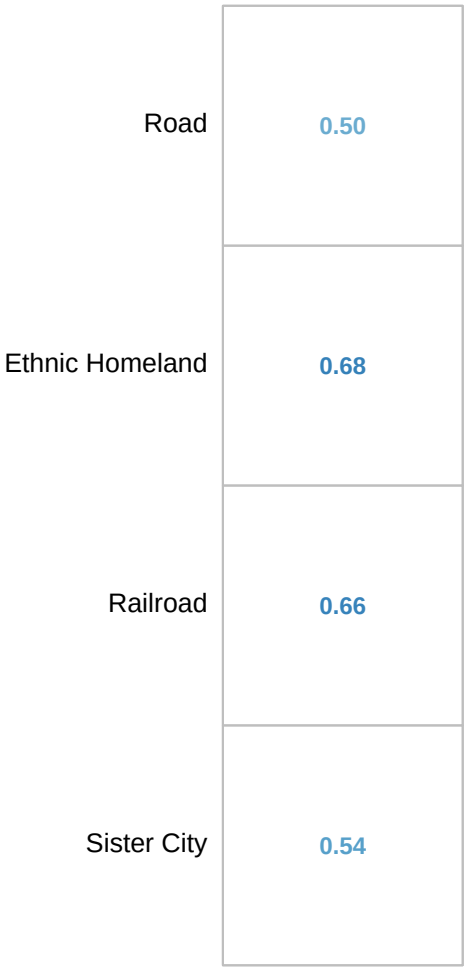
[63]The simple additive index is appropriate over other approaches like item response theory or principal components analysis because, first, the expected relationships between the items and the index are simple and, second, because there are only four items and the alternative approaches perform well only with a greater number of items.

[64]I use a six-point ordinal scale because the intention is to create categories that theoretically capture different degrees of connection based on meaningful differences in proximity. These categories should range from no proximity to immediate proximity, with gradation in between. Therefore, continuous distance values are recoded into 1 of 6 ordinal categories as follows: 0 for when the item is not present in the borderland side at all, 1 for when the item is 100 or more KM away, 2 for when the item is between 50 and less than 100 KM away, 3 for when the item is between 15 and less than 50 KM away, 4 for when the item is between 5 and less than 15 KM away, and 5 for when the item is less than 5 KM away.

[65]It would not be sensible to compare the distances of all cells to a border-intersecting road, for example, when only some borderland sides have such a road in the first place. Using an ordinal measure of distance makes it possible to situate all communities on their relative proximity to a given item, whether or not that item exists in a particular borderland side.

item meaningfully contributes to the overall index scores. The item-total correlations indicate that each item has a moderate-to-strong association with the overall index, with ethnic homelands and railroads having the strongest correlations (see Figure 8).

Figure 8: Item-Total Correlations of the Transnationality Index



2 Nomological Validity

This section details the analyses used in the two nomological validity tests of the Transnationality measure (Adcock and Collier, 2001). Of these, the first assumed hypothesis is that *The more transnational a borderland community, the wealthier it is.* Transnationality is conceptually defined in part on the basis of cross-border economic

ties. Economic gains are a key motivator for sustaining transnational ties, especially in what are otherwise marginal borderland areas that receive little state investment (Idler, 2019; Gallien, 2020; Matanzima, Helliker and Pophiwa, 2023; Miggelbrink, 2014; Su, 2022). Thus, comparatively more transnational borderland communities should be wealthier.

I evaluate the association between Transnationality and wealth in an OLS framework. Wealth is measured using global raster data from that has estimates of the gross domestic production (GDP) of each grid cell for the closest prior year of 2015 (Kummu, Taka and Guillaume, 2018). I changed the resolution of this continuous variable to match the Transnationality data by aggregating from the original 10x10 KM cell size via a summation function. Additionally, the GDP variable is logged because it is highly skewed. To make this logging possible, I first replaced all values of 0 in the data by adding 0.5 to all observations. The models incorporate as independent variables Transnationality, Population, and the same fixed effects specifications used within analyses shared in the body of the paper (borderland side, borderland, and country). Following the approach adopted in the main body of the paper, all of the independent variables are rescaled to ensure that they are on a common scale (Gelman, 2008)

The results are displayed in Table 3. Overall, the results indicate that the measure passes this validity test. As assumed, Transnationality positively and significantly associates with wealth. This indicates that communities scored as comparatively more transnational by the measure tend to be wealthier.

Table 3: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.765***	1.693***	1.592***
	(0.043)	(0.042)	(0.033)
Population	0.851***	0.909***	1.009***
	(0.022)	(0.022)	(0.023)
Constant	16.001***	15.910***	15.180***
	(0.442)	(0.116)	(0.087)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	66,570	66,570	66,570
R^2	0.474	0.441	0.361
Adjusted R^2	0.469	0.438	0.360

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells.

The assumed hypothesis for the second nomological validity test is that *The more transnational a borderland community, the less time it will take to travel from it to the nearest border crossing.* If Transnationality represents connection across borders, travel to the nearest border crossing should be more efficient from comparatively more

transnational communities. This is especially the case in terms of infrastructure like roads and railroads. Since Transnationality is not highly correlated with distance to the border (see the main text as well as Appendices 3, 4, 5, and 6), it is reasonable to compare communities of different transnationality values by distance as a nomological validity test.

As with the first validity test, I use an OLS regression framework that includes a variety of model specifications and rescales the independent variables. The information on border crossings comes from the most comprehensive global dataset on where formal ports of entry are located (Kenwick, Simmons and McAlexander, 2023). In order to calculate travel time, I linked each cell to the nearest border crossing (for the relevant border) in terms of Euclidean distance and then used the Open Source Routing Machine (OSRM) API to calculate the direct route driving time (Open Source Routing Machine, N.d.). While the approach usefully approximates travel time, OSRM is not able to calculate routes for all parts of the world. Thus, the sample for this data includes grid cells in 260 borderland sides rather than the full set of 612. The resultant driving time variable is logged because it is highly skewed. To make logging possible, I first replaced all values of 0 in the variable by adding 0.5 to all observations.

The results are displayed in Table 4. Overall, the results provide evidence for the validity of the Transnationality measure. As assumed, Transnationality consistently predicts shorter travel time to the nearest border crossing. The coefficient is consistently negative and statistically significant, even when accounting for the actual distance of the cell to the nearest border crossing (Models 2, 4, and 6).

Table 4: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.06***	−0.04***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Distance		1.06***		1.06***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.19***	8.87***	8.52***	8.87***	8.54***
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	20,068	20,068	20,068	20,068	20,068	20,068
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells.

3 Robustness Check: Alternative Ordinalization Scheme

This section replicates the analyses with an alternative coding scheme for the items comprising Transnationality. The raw values for the distance between each grid cell and each item were originally converted to an ordinal scale. This step was taken to make cells comparable across borderlands, regardless of whether or not they contain any instances of a given item (e.g., a border-intersecting road). The original coding scheme for each cell was: 0 for when the item is not present in the borderland side at all, 1 for when the item is 100 or more KM away, 2 for when the item is between 50 and less than 100 KM away, 3 for when the item is between 15 and less than 50 KM away, 4 for when the item is between 5 and less than 15 KM away, and 5 for when the item is less than 5 KM away.

For the analyses here, the coding scheme is shrunk to: 0 for when the item is not present in the borderland side at all, 1 for when the item is 75 or more KM away, 2 for when the item is between 15 and less than 75 KM away, and 3 for when the item is less than 15 KM away. The items are then aggregated in the same fashion to construct the additive index of Transnationality.

Using this version of the index yields substantively similar results for all analyses. The correlation between Transnationality and distance from the border remains weak, Transnationality predicts greater wealth, and Transnationality predicts reduced travel time to the nearest border crossing.

3.1 Validity Tests

First, the correlation between Transnationality, using this alternative coding scheme, and distance from the border remains weak ($\rho = -0.3$).

Table 5: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.621***	1.563***	1.380***
	(0.041)	(0.040)	(0.030)
Population	0.839***	0.897***	1.001***
	(0.022)	(0.022)	(0.024)
Constant	17.382***	17.207***	16.285***
	(0.443)	(0.113)	(0.079)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	66,570	66,570	66,570
R^2	0.473	0.440	0.359
Adjusted R^2	0.468	0.437	0.358

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

Table 6: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.06***	−0.04***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Distance		1.06***		1.06***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.19***	8.87***	8.52***	8.87***	8.53***
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	20,068	20,068	20,068	20,068	20,068	20,068
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

3.2 Transnational Resistance Hypothesis Test

Table 7: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	4.16***	4.23***	3.89***	3.77***	1.59***	1.49***
	(0.29)	(0.30)	(0.27)	(0.28)	(0.18)	(0.18)
Population	0.50***	0.50***	0.27***	0.27***	0.24***	0.24***
	(0.10)	(0.10)	(0.07)	(0.07)	(0.06)	(0.05)
Natural Resources	1.02***	1.04***	1.14***	1.10***	1.47***	1.34***
	(0.30)	(0.30)	(0.28)	(0.28)	(0.27)	(0.28)
Ruggedness	−0.53**	−0.55***	−0.40**	−0.39**	−0.53***	−0.43**
	(0.21)	(0.21)	(0.20)	(0.20)	(0.17)	(0.17)
Capital Distance	0.60	0.59	0.05	0.08	−0.36	−0.35
	(0.67)	(0.67)	(0.36)	(0.36)	(0.42)	(0.41)
Proximate Event		−0.19		0.39**		0.99***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	15,998	15,998	22,015	22,015	30,454	30,454

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Transnationality measure uses the alternative item ordinalization scheme.

4 Robustness Check: 20x20 KM Grid Cell Size

This section replicates all analyses with 20x20 KM grid cells. The note in each table indicates if the models use the secondary version of Transnationality described in Appendix 3. All results are substantively similar to the primary analyses.

4.1 Validity Tests

First, the correlation between Transnationality, using the main coding scheme, and distance from the border remains weak ($\rho = -0.33$). When using the alternative ordinalization scheme, the correlation is still weak ($\rho = -0.3$).

Table 8: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.722***	1.639***	1.506***
	(0.031)	(0.031)	(0.024)
Population	0.897***	0.954***	1.048***
	(0.016)	(0.017)	(0.018)
Constant	14.747***	14.789***	13.947***
	(0.340)	(0.088)	(0.067)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	130,894	130,894	130,894
R^2	0.453	0.419	0.348
Adjusted R^2	0.451	0.418	0.347

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells.

Table 9: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.05***	−0.04***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Distance		1.10***		1.10***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.15***	8.87***	8.50***	8.87***	8.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	36,383	36,383	36,383	36,383	36,383	36,383
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells.

Table 10: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.642***	1.562***	1.345***
	(0.032)	(0.031)	(0.023)
Population	0.888***	0.945***	1.043***
	(0.016)	(0.017)	(0.018)
Constant	16.198***	16.137***	15.083***
	(0.341)	(0.086)	(0.061)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	130,894	130,894	130,894
R^2	0.452	0.418	0.346
Adjusted R^2	0.449	0.417	0.345

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

Table 11: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.05***	−0.04***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Distance		1.10***		1.10***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.15***	8.87***	8.50***	8.86***	8.52***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	36,383	36,383	36,383	36,383	36,383	36,383
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

4.2 Transnational Resistance Hypothesis Test

Table 12: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.64***	3.62***	3.52***	3.36***	1.79***	1.65***
	(0.23)	(0.24)	(0.22)	(0.23)	(0.16)	(0.17)
Population	0.38***	0.38***	0.25***	0.25***	0.16***	0.16***
	(0.07)	(0.07)	(0.05)	(0.05)	(0.04)	(0.04)
Natural Resources	1.07***	1.07***	1.24***	1.23***	1.68***	1.58***
	(0.34)	(0.34)	(0.31)	(0.31)	(0.31)	(0.31)
Ruggedness	−0.56***	−0.56***	−0.44**	−0.41**	−0.57***	−0.43***
	(0.20)	(0.20)	(0.19)	(0.19)	(0.16)	(0.16)
Capital Distance	0.61	0.61	−0.18	−0.10	−0.33	−0.29
	(0.65)	(0.65)	(0.35)	(0.35)	(0.41)	(0.41)
Proximate Event		0.04		0.59***		1.13***
		(0.19)		(0.18)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	31,553	31,553	43,066	43,066	59,662	59,662

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.

Table 13: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.97***	3.93***	3.80***	3.58***	1.63***	1.46***
	(0.28)	(0.29)	(0.26)	(0.27)	(0.18)	(0.18)
Population	0.33***	0.33***	0.22***	0.22***	0.16***	0.16***
	(0.07)	(0.07)	(0.05)	(0.05)	(0.04)	(0.04)
Natural Resources	1.05***	1.04***	1.20***	1.19***	1.63***	1.52***
	(0.33)	(0.33)	(0.31)	(0.31)	(0.31)	(0.31)
Ruggedness	−0.58***	−0.57***	−0.42**	−0.40**	−0.61***	−0.46***
	(0.20)	(0.20)	(0.19)	(0.19)	(0.16)	(0.16)
Capital Distance	0.70	0.70	−0.06	0.01	−0.24	−0.21
	(0.65)	(0.65)	(0.35)	(0.35)	(0.41)	(0.40)
Proximate Event		0.09		0.64***		1.20***
		(0.19)		(0.18)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	31,553	31,553	43,066	43,066	59,662	59,662

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.

Transnationality measure uses the alternative item ordinalization scheme.

5 Robustness Check: 40x40 KM Grid Cell Size

This section replicates all analyses with 40x40 KM grid cells. The note in each table indicates if the models use the secondary version of Transnationality described in Appendix 3. All results are substantively similar to the primary analyses.

5.1 Validity Tests

First, the correlation between Transnationality, using the main coding scheme, and distance from the border remains weak ($\rho = -0.16$). When using the alternative ordinalization scheme, the correlation is still weak ($\rho = -0.22$).

Table 14: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.532***	1.453***	1.331***
	(0.045)	(0.044)	(0.035)
Population	0.847***	0.896***	1.023***
	(0.027)	(0.027)	(0.029)
Constant	18.292***	17.745***	17.256***
	(0.557)	(0.134)	(0.096)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	41,600	41,600	41,600
R^2	0.501	0.469	0.377
Adjusted R^2	0.493	0.465	0.375

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells.

Table 15: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.06***	−0.04***
	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)
Distance		1.06***		1.06***		0.96***
		(0.02)		(0.02)		(0.01)
Constant	9.18***	8.21***	7.76***	7.75***	7.80***	7.78***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	11,708	11,708	11,708	11,708	11,708	11,708
R^2	0.98	0.99	0.98	0.99	0.95	0.97
Adjusted R^2	0.98	0.99	0.98	0.99	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells.

Table 16: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.604***	1.528***	1.309***
	(0.049)	(0.048)	(0.036)
Population	0.836***	0.884***	1.017***
	(0.027)	(0.027)	(0.029)
Constant	18.457***	17.867***	17.274***
	(0.558)	(0.134)	(0.096)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	41,600	41,600	41,600
R^2	0.500	0.468	0.375
Adjusted R^2	0.492	0.464	0.373

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

Table 17: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.06***	−0.04***
	(0.004)	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)
Distance		1.06***		1.06***		0.96***
		(0.02)		(0.02)		(0.01)
Constant	9.18***	8.21***	7.77***	7.75***	7.80***	7.78***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	11,708	11,708	11,708	11,708	11,708	11,708
R^2	0.98	0.99	0.98	0.99	0.95	0.97
Adjusted R^2	0.98	0.99	0.98	0.99	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.

5.2 Transnational Resistance Hypothesis Test

Table 18: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.16***	3.26***	2.99***	2.94***	1.45***	1.37***
	(0.25)	(0.26)	(0.24)	(0.24)	(0.17)	(0.18)
Population	0.48***	0.49***	0.29***	0.29***	0.23***	0.23***
	(0.11)	(0.11)	(0.08)	(0.08)	(0.07)	(0.07)
Natural Resources	1.00***	1.03***	1.13***	1.11***	1.46***	1.36***
	(0.29)	(0.29)	(0.26)	(0.26)	(0.27)	(0.27)
Ruggedness	−0.39*	−0.42**	−0.25	−0.24	−0.40**	−0.33**
	(0.21)	(0.21)	(0.19)	(0.19)	(0.17)	(0.17)
Capital Distance	0.34	0.33	−0.11	−0.09	−0.63	−0.59
	(0.67)	(0.68)	(0.37)	(0.37)	(0.43)	(0.42)
Proximate Event		−0.33*		0.20		0.77***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	9,944	9,944	13,722	13,722	19,002	19,002

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.

Table 19: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.82***	3.91***	3.60***	3.54***	1.51***	1.44***
	(0.30)	(0.30)	(0.28)	(0.28)	(0.19)	(0.19)
Population	0.40***	0.40***	0.26***	0.26***	0.22***	0.22***
	(0.11)	(0.11)	(0.08)	(0.08)	(0.07)	(0.07)
Natural Resources	0.98***	0.99***	1.07***	1.05***	1.42***	1.32***
	(0.29)	(0.29)	(0.26)	(0.26)	(0.27)	(0.27)
Ruggedness	−0.38*	−0.41*	−0.24	−0.24	−0.41**	−0.33**
	(0.21)	(0.21)	(0.19)	(0.19)	(0.17)	(0.17)
Capital Distance	0.34	0.34	−0.003	0.02	−0.58	−0.54
	(0.67)	(0.67)	(0.37)	(0.37)	(0.42)	(0.42)
Proximate Event		−0.27		0.23		0.82***
		(0.18)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	9,944	9,944	13,722	13,722	19,002	19,002

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Transnationality measure uses the alternative item ordinalization scheme.

6 Robustness Check: Excluding Sister City Item

This section replicates all analyses but using a version of the Transnationality measure that does not incorporate sister cities as an item. Sister cities are distinct from the other items (roads, ethnic homelands, and railroads) in occupying precise point locations rather than extending across larger spaces. Sister cities thus might have a fundamentally different geographic relationship to borders in ways that, when incorporated into the Transnationality measure, bias the results.

However, resolving this concern, all results are substantively similar when using a version of Transnationality that excludes sister cities. First, the correlation between Transnationality without the sister city item and distance from the border remains generally weak. This relationship holds across all variants of the measure. Second, Transnationality continues to positively and significantly predict wealth as assumed for the nomological validity test. Third, Transnationality continues to negatively and significantly predict travel time to the nearest border crossing as assumed for the nomological validity test. Finally, replicating the primary analyses testing the **Transnational Resistance Hypothesis**, Transnationality has a positive and significant relationship with Resistance to a pandemic border closure. Overall, these consistent results demonstrate that the analyses are robust to this additional modification of Transnationality.

6.1 Validity Tests

Transnationality Measure Version	ρ with Distance from Border
20x20 KM and Primary Ordinalization Scheme	-0.37
20x20 KM and Alternative Ordinalization Scheme	-0.35
30x30 KM and Primary Ordinalization Scheme	-0.37
30x30 KM and Alternative Ordinalization Scheme	-0.35
40x40 KM and Primary Ordinalization Scheme	-0.16
40x40 KM and Alternative Ordinalization Scheme	-0.22

Table 20: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.260***	1.205***	1.177***
	(0.026)	(0.026)	(0.020)
Population	0.922***	0.977***	1.073***
	(0.016)	(0.017)	(0.018)
Constant	15.844***	15.885***	15.265***
	(0.342)	(0.086)	(0.061)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	130,894	130,894	130,894
R^2	0.450	0.417	0.345
Adjusted R^2	0.448	0.415	0.344

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells.
Transnationality measure does not include the sister city item.

Table 21: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.261***	1.223***	1.132***
	(0.028)	(0.028)	(0.021)
Population	0.914***	0.969***	1.067***
	(0.016)	(0.017)	(0.018)
Constant	15.963***	15.968***	15.322***
	(0.342)	(0.086)	(0.061)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	130,894	130,894	130,894
R^2	0.449	0.416	0.343
Adjusted R^2	0.447	0.414	0.342

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells.
Transnationality measure uses the alternative item ordinalization scheme. Transnationality measure does not include the sister city item.

Table 22: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.246***	1.197***	1.199***
	(0.034)	(0.034)	(0.027)
Population	0.876***	0.933***	1.036***
	(0.022)	(0.022)	(0.024)
Constant	17.033***	16.949***	16.470***
	(0.444)	(0.113)	(0.079)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	66,570	66,570	66,570
R^2	0.471	0.438	0.358
Adjusted R^2	0.466	0.435	0.356

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells.
Transnationality measure does not include the sister city item.

Table 23: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.260***	1.230***	1.167***
	(0.036)	(0.036)	(0.027)
Population	0.865***	0.922***	1.027***
	(0.022)	(0.022)	(0.024)
Constant	17.161***	17.041***	16.529***
	(0.444)	(0.113)	(0.079)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	66,570	66,570	66,570
R^2	0.470	0.437	0.356
Adjusted R^2	0.465	0.435	0.355

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells.
Transnationality measure uses the alternative item ordinalization scheme. Transnationality measure does not include the sister city item.

Table 24: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.245***	1.186***	1.147***
	(0.041)	(0.040)	(0.032)
Population	0.873***	0.920***	1.050***
	(0.027)	(0.027)	(0.029)
Constant	18.122***	17.623***	17.439***
	(0.559)	(0.134)	(0.095)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	41,600	41,600	41,600
R^2	0.498	0.466	0.374
Adjusted R^2	0.491	0.462	0.372

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells.
Transnationality measure does not include the sister city item.

Table 25: Transnationality and Wealth (OLS)

	Dependent variable: GDP (Logged)		
	(1)	(2)	(3)
Transnationality	1.255***	1.219***	1.113***
	(0.043)	(0.043)	(0.033)
Population	0.862***	0.908***	1.042***
	(0.027)	(0.027)	(0.029)
Constant	18.245***	17.706***	17.504***
	(0.560)	(0.134)	(0.095)
Borderland Side FEs	✓		
Borderland FEs		✓	
Country FEs			✓
N	41,600	41,600	41,600
R^2	0.497	0.466	0.372
Adjusted R^2	0.490	0.462	0.370

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells.
Transnationality measure uses the alternative item ordinalization scheme. Transnationality measure does not include the sister city item.

Table 26: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.03***	−0.03***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Distance		1.10***		1.10***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.15***	8.87***	8.50***	8.87***	8.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	36,383	36,383	36,383	36,383	36,383	36,383
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells.
Transnationality measure does not include the sister city item.

Table 27: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.03***	−0.03***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Distance		1.10***		1.10***		0.94***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.15***	8.87***	8.50***	8.87***	8.53***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	36,383	36,383	36,383	36,383	36,383	36,383
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

Table 28: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.04***	−0.03***
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)
Distance		1.06***		1.06***		0.95***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.19***	8.87***	8.52***	8.88***	8.54***
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	20,068	20,068	20,068	20,068	20,068	20,068
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells.
Transnationality measure does not include the sister city item.

Table 29: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.04***	−0.03***
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)
Distance		1.06***		1.06***		0.95***
		(0.01)		(0.01)		(0.01)
Constant	9.19***	8.19***	8.87***	8.52***	8.87***	8.54***
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	20,068	20,068	20,068	20,068	20,068	20,068
R^2	0.98	0.98	0.98	0.98	0.95	0.97
Adjusted R^2	0.98	0.98	0.98	0.98	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

Table 30: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.04***	−0.03***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)
Distance		1.06***		1.06***		0.96***
		(0.02)		(0.02)		(0.01)
Constant	9.19***	8.21***	7.76***	7.75***	7.78***	7.77***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	11,708	11,708	11,708	11,708	11,708	11,708
R^2	0.98	0.99	0.98	0.99	0.95	0.97
Adjusted R^2	0.98	0.99	0.98	0.99	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells.
Transnationality measure does not include the sister city item.

Table 31: Transnationality and Travel Time to Border (OLS)

	Dependent variable: Driving Time to Border Crossing (Logged)					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	−0.01***	−0.01***	−0.01***	−0.01***	−0.04***	−0.03***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)
Distance		1.06***		1.06***		0.96***
		(0.02)		(0.02)		(0.01)
Constant	9.19***	8.21***	7.76***	7.75***	7.78***	7.77***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	11,708	11,708	11,708	11,708	11,708	11,708
R^2	0.98	0.99	0.98	0.99	0.95	0.97
Adjusted R^2	0.98	0.99	0.98	0.99	0.95	0.97

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

6.2 Transnational Resistance Hypothesis Test

Table 32: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.28***	3.25***	3.25***	3.10***	1.77***	1.64***
	(0.21)	(0.22)	(0.21)	(0.21)	(0.15)	(0.16)
Population	0.44***	0.44***	0.28***	0.28***	0.18***	0.18***
	(0.07)	(0.07)	(0.06)	(0.06)	(0.04)	(0.04)
Natural Resources	1.10***	1.10***	1.33***	1.31***	1.75***	1.65***
	(0.34)	(0.34)	(0.31)	(0.31)	(0.31)	(0.31)
Ruggedness	−0.54***	−0.53***	−0.43**	−0.39**	−0.54***	−0.41**
	(0.20)	(0.20)	(0.19)	(0.19)	(0.16)	(0.16)
Capital Distance	0.80	0.81	−0.40	−0.31	−0.44	−0.41
	(0.67)	(0.67)	(0.35)	(0.35)	(0.42)	(0.42)
Proximate Event		0.10		0.62***		1.10***
		(0.19)		(0.18)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	31,553	31,553	43,066	43,066	59,662	59,662

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Transnationality measure does not include the sister city item.

Table 33: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.57***	3.53***	3.53***	3.33***	1.62***	1.47***
	(0.25)	(0.26)	(0.24)	(0.25)	(0.17)	(0.17)
Population	0.41***	0.41***	0.26***	0.26***	0.18***	0.18***
	(0.07)	(0.07)	(0.05)	(0.05)	(0.04)	(0.04)
Natural Resources	1.06***	1.06***	1.28***	1.25***	1.70***	1.58***
	(0.34)	(0.33)	(0.31)	(0.31)	(0.31)	(0.31)
Ruggedness	−0.55***	−0.54***	−0.42**	−0.39**	−0.57***	−0.43***
	(0.20)	(0.20)	(0.19)	(0.19)	(0.16)	(0.16)
Capital Distance	0.90	0.90	−0.33	−0.24	−0.34	−0.32
	(0.67)	(0.67)	(0.35)	(0.35)	(0.41)	(0.41)
Proximate Event		0.12		0.64***		1.16***
		(0.19)		(0.18)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	31,553	31,553	43,066	43,066	59,662	59,662

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

Table 34: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.16***	3.21***	3.02***	2.92***	1.56***	1.47***
	(0.23)	(0.23)	(0.22)	(0.22)	(0.16)	(0.16)
Population	0.65***	0.65***	0.36***	0.36***	0.27***	0.27***
	(0.10)	(0.10)	(0.08)	(0.08)	(0.06)	(0.06)
Natural Resources	1.13***	1.14***	1.29***	1.25***	1.58***	1.45***
	(0.30)	(0.30)	(0.27)	(0.28)	(0.28)	(0.28)
Ruggedness	−0.52**	−0.54**	−0.42**	−0.41**	−0.48***	−0.40**
	(0.21)	(0.21)	(0.20)	(0.20)	(0.17)	(0.17)
Capital Distance	0.71	0.70	−0.33	−0.28	−0.52	−0.50
	(0.68)	(0.69)	(0.36)	(0.36)	(0.43)	(0.42)
Proximate Event		−0.19		0.40**		0.92***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	15,998	15,998	22,015	22,015	30,454	30,454

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Transnationality measure does not include the sister city item.

Table 35: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.78***	3.84***	3.66***	3.55***	1.65***	1.57***
	(0.26)	(0.27)	(0.26)	(0.26)	(0.17)	(0.17)
Population	0.61***	0.62***	0.33***	0.33***	0.27***	0.26***
	(0.10)	(0.10)	(0.07)	(0.07)	(0.06)	(0.06)
Natural Resources	1.04***	1.05***	1.20***	1.16***	1.54***	1.41***
	(0.30)	(0.30)	(0.28)	(0.28)	(0.28)	(0.28)
Ruggedness	−0.50**	−0.51**	−0.39*	−0.38*	−0.49***	−0.40**
	(0.21)	(0.21)	(0.20)	(0.20)	(0.17)	(0.17)
Capital Distance	0.80	0.80	−0.26	−0.22	−0.48	−0.47
	(0.69)	(0.69)	(0.36)	(0.36)	(0.43)	(0.42)
Proximate Event		−0.18		0.39**		0.95***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	15,998	15,998	22,015	22,015	30,454	30,454

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

Table 36: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	2.88***	2.95***	2.77***	2.72***	1.46***	1.39***
	(0.23)	(0.24)	(0.22)	(0.23)	(0.17)	(0.17)
Population	0.56***	0.57***	0.34***	0.34***	0.26***	0.26***
	(0.11)	(0.11)	(0.08)	(0.08)	(0.07)	(0.07)
Natural Resources	1.03***	1.05***	1.19***	1.17***	1.52***	1.41***
	(0.29)	(0.29)	(0.26)	(0.26)	(0.27)	(0.27)
Ruggedness	−0.36*	−0.39*	−0.23	−0.23	−0.37**	−0.31*
	(0.21)	(0.21)	(0.19)	(0.19)	(0.17)	(0.17)
Capital Distance	0.44	0.43	−0.31	−0.28	−0.74*	−0.70
	(0.69)	(0.70)	(0.37)	(0.37)	(0.43)	(0.43)
Proximate Event		−0.28		0.24		0.76***
		(0.19)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	9,944	9,944	13,722	13,722	19,002	19,002

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Transnationality measure does not include the sister city item.

Table 37: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.43***	3.50***	3.37***	3.31***	1.55***	1.49***
	(0.27)	(0.27)	(0.26)	(0.26)	(0.18)	(0.18)
Population	0.49***	0.50***	0.32***	0.32***	0.25***	0.25***
	(0.11)	(0.11)	(0.07)	(0.07)	(0.07)	(0.07)
Natural Resources	1.01***	1.02***	1.14***	1.12***	1.48***	1.37***
	(0.29)	(0.29)	(0.26)	(0.26)	(0.27)	(0.27)
Ruggedness	−0.34	−0.36*	−0.21	−0.20	−0.37**	−0.30*
	(0.21)	(0.21)	(0.19)	(0.19)	(0.17)	(0.17)
Capital Distance	0.49	0.49	−0.26	−0.23	−0.70	−0.66
	(0.69)	(0.70)	(0.37)	(0.37)	(0.43)	(0.43)
Proximate Event		−0.24		0.25		0.80***
		(0.18)		(0.17)		(0.17)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	9,944	9,944	13,722	13,722	19,002	19,002

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Transnationality measure uses the alternative item ordinalization scheme.
Transnationality measure does not include the sister city item.

7 Robustness Check: Linear Probability Modeling

This section replicates the primary analyses of Transnationality and Resistance presented in the main body of the paper but with a linear probability modeling approach involving ordinary least squares that includes the entire sample across the fixed effects specifications. Robust standard errors are calculated using the Huber-White correction in order to account for heteroskedasticity. The note in each table indicates the grid cell size. The results for Transnationality are substantively similar to the primary analyses, indicating robustness to this alternative modeling approach.

Table 38: Transnationality and Resistance Against COVID-19 Border Closures (OLS)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	0.01***	0.01***	0.01***	0.01***	0.004***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Population	0.01***	0.01***	0.005***	0.005***	0.01***	0.01***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Natural Resources	0.01**	0.01**	0.01**	0.01**	0.01**	0.01**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Ruggedness	−0.002***	−0.002***	−0.001***	−0.001**	−0.001***	−0.001***
	(0.001)	(0.0005)	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Capital Distance	0.001***	0.001**	0.0002	0.0002	0.001***	0.001***
	(0.0004)	(0.0004)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Proximate Event		0.02***		0.03***		0.03***
		(0.005)		(0.01)		(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	120127	120,127	120,127	120,127	120,127	120,127

*p < .1; **p < .05; ***p < .01

Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.

Robust standard errors calculated using the Huber-White correction for heteroskedasticity.

Table 39: Transnationality and Resistance Against COVID-19 Border Closures (OLS)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	0.01***	0.01***	0.01***	0.01***	0.01***	0.01***
	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Population	0.01***	0.01***	0.01***	0.01***	0.01***	0.01***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)
Natural Resources	0.01**	0.01**	0.01**	0.01**	0.01***	0.01**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Ruggedness	−0.003***	−0.003***	−0.002***	−0.002***	−0.002***	−0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Capital Distance	0.002**	0.002**	0.0003	0.0003	0.001***	0.001***
	(0.001)	(0.001)	(0.0004)	(0.0004)	(0.0005)	(0.0004)
Proximate Event		0.02***		0.02***		0.03***
		(0.01)		(0.01)		(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	61,123	61,123	61,123	61,123	61,123	61,123

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Robust standard errors calculated using the Huber-White correction for heteroskedasticity.

Table 40: Transnationality and Resistance Against COVID-19 Border Closures (OLS)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	0.02***	0.02***	0.02***	0.02***	0.01***	0.01***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)
Population	0.01***	0.01***	0.01***	0.01***	0.01***	0.01***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Natural Resources	0.01**	0.01**	0.01***	0.01***	0.01***	0.01***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
Ruggedness	−0.004***	−0.004**	−0.002*	−0.002*	−0.003**	−0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Capital Distance	0.003**	0.003*	0.0004	0.0003	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Proximate Event		0.01		0.02***		0.03***
		(0.01)		(0.01)		(0.01)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	38,186	38,186	38,186	38,186	38,186	38,186

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Robust standard errors calculated using the Huber-White correction for heteroskedasticity.

8 Subgroup Analyses: State Capacity

In terms of state capacity, resistance may not emerge in the borderlands of low-capacity states that cannot meaningfully enforce rules like pandemic closures. However, in a series of subgroup analyses across the subsamples of communities in Organization for Economic Co-operation and Development (OECD) countries and communities in non-OECD countries, Transnationality continues to hold a positive and significant association with Resistance.

This section replicates the primary analyses of Transnationality and Resistance presented in the main body of the paper but after dividing the sample into cells in either OECD countries or non-OECD countries. The first set of tables includes models among OECD countries, and the second set of tables includes models among non-OECD countries. The note in each table indicates the grid cell size. All results are substantively similar to the primary analyses.

Table 41: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.74***	3.65***	3.65***	3.52***	1.56***	1.46***
	(0.33)	(0.34)	(0.32)	(0.33)	(0.22)	(0.22)
Population	0.53***	0.53***	0.49***	0.49***	0.45***	0.45***
	(0.10)	(0.10)	(0.10)	(0.10)	(0.09)	(0.10)
Natural Resources	0.55	0.55	0.76	0.77	1.32**	1.15*
	(0.64)	(0.64)	(0.60)	(0.60)	(0.62)	(0.62)
Ruggedness	−0.42	−0.41	−0.30	−0.28	−0.48*	−0.44*
	(0.32)	(0.32)	(0.30)	(0.30)	(0.25)	(0.25)
Capital Distance	0.18	0.20	0.35	0.30	1.13	0.97
	(0.85)	(0.85)	(0.67)	(0.66)	(0.75)	(0.72)
Proximate Event		0.26		0.43*		1.40***
		(0.24)		(0.24)		(0.22)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	12,001	12,001	15,449	15,449	17,019	17,019

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Only cells in OECD countries are included.

Table 42: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.57***	3.52***	3.44***	3.33***	1.28***	1.25***
	(0.35)	(0.36)	(0.34)	(0.35)	(0.23)	(0.23)
Population	0.63***	0.64***	0.55***	0.56***	0.53***	0.56***
	(0.15)	(0.15)	(0.14)	(0.14)	(0.13)	(0.14)
Natural Resources	0.67	0.66	0.82	0.78	1.05*	0.83
	(0.60)	(0.60)	(0.55)	(0.55)	(0.56)	(0.57)
Ruggedness	−0.34	−0.33	−0.23	−0.23	−0.39	−0.38
	(0.34)	(0.34)	(0.30)	(0.31)	(0.25)	(0.25)
Capital Distance	−0.08	−0.07	0.18	0.10	0.71	0.57
	(0.91)	(0.91)	(0.69)	(0.69)	(0.73)	(0.71)
Proximate Event		0.16		0.39*		1.32***
		(0.24)		(0.23)		(0.21)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	6,066	6,066	7,931	7,931	8,642	8,642

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Only cells in OECD countries are included.

Table 43: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.10***	3.09***	2.97***	2.92***	1.16***	1.12***
	(0.36)	(0.36)	(0.35)	(0.35)	(0.24)	(0.25)
Population	0.62***	0.62***	0.56***	0.56***	0.47***	0.50***
	(0.17)	(0.17)	(0.16)	(0.16)	(0.15)	(0.16)
Natural Resources	1.20**	1.19**	1.13**	1.10**	1.75***	1.46***
	(0.55)	(0.55)	(0.48)	(0.48)	(0.50)	(0.51)
Ruggedness	−0.29	−0.29	−0.10	−0.10	−0.42	−0.40
	(0.35)	(0.35)	(0.32)	(0.32)	(0.26)	(0.26)
Capital Distance	−0.15	−0.14	−0.17	−0.19	0.37	0.25
	(0.93)	(0.93)	(0.73)	(0.73)	(0.72)	(0.70)
Proximate Event		0.05		0.18		1.09***
		(0.24)		(0.24)		(0.21)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	3,757	3,757	4,926	4,926	5,376	5,376

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Only cells in OECD countries are included.

Table 44: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.61***	3.68***	3.42***	3.25***	2.12***	2.00***
	(0.34)	(0.35)	(0.32)	(0.33)	(0.26)	(0.26)
Population	0.30***	0.31***	0.19***	0.19***	0.12***	0.12***
	(0.08)	(0.08)	(0.06)	(0.06)	(0.04)	(0.04)
Natural Resources	1.33***	1.34***	1.47***	1.44***	1.67***	1.63***
	(0.39)	(0.39)	(0.37)	(0.36)	(0.35)	(0.35)
Ruggedness	−0.63**	−0.68**	−0.50**	−0.44*	−0.59***	−0.47**
	(0.26)	(0.26)	(0.25)	(0.25)	(0.22)	(0.23)
Capital Distance	1.19	1.17	−0.27	−0.09	−1.07**	−1.00*
	(1.02)	(1.02)	(0.45)	(0.45)	(0.52)	(0.52)
Proximate Event		−0.26		0.74***		0.60**
		(0.30)		(0.26)		(0.30)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	19,552	19,552	27,617	27,617	42,643	42,643

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Only cells in non-OECD countries are included.

Table 45: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.40***	3.68***	3.14***	3.07***	1.88***	1.83***
	(0.36)	(0.37)	(0.33)	(0.34)	(0.26)	(0.27)
Population	0.52***	0.54***	0.25***	0.25***	0.19***	0.19***
	(0.12)	(0.12)	(0.07)	(0.07)	(0.06)	(0.06)
Natural Resources	1.30***	1.38***	1.43***	1.41***	1.58***	1.55***
	(0.35)	(0.35)	(0.32)	(0.32)	(0.32)	(0.32)
Ruggedness	−0.65**	−0.78***	−0.52**	−0.51*	−0.56**	−0.52**
	(0.28)	(0.28)	(0.27)	(0.27)	(0.23)	(0.24)
Capital Distance	1.32	1.23	−0.05	−0.001	−1.03*	−1.00*
	(1.05)	(1.06)	(0.46)	(0.46)	(0.53)	(0.53)
Proximate Event		−0.84***		0.28		0.24
		(0.31)		(0.26)		(0.30)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	9,932	9,932	14,084	14,084	21,812	21,812

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Only cells in non-OECD countries are included.

Table 46: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.31***	3.58***	3.13***	3.09***	1.89***	1.85***
	(0.37)	(0.38)	(0.35)	(0.35)	(0.27)	(0.27)
Population	0.43***	0.47***	0.24***	0.24***	0.18***	0.18***
	(0.13)	(0.13)	(0.08)	(0.08)	(0.07)	(0.07)
Natural Resources	0.98***	0.99***	1.16***	1.15***	1.27***	1.26***
	(0.35)	(0.35)	(0.32)	(0.32)	(0.32)	(0.32)
Ruggedness	−0.39	−0.51*	−0.24	−0.23	−0.32	−0.29
	(0.26)	(0.27)	(0.24)	(0.24)	(0.22)	(0.22)
Capital Distance	1.06	1.02	0.05	0.08	−1.20**	−1.17**
	(1.06)	(1.08)	(0.47)	(0.47)	(0.54)	(0.54)
Proximate Event		−0.88***		0.17		0.19
		(0.31)		(0.26)		(0.29)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	6,187	6,187	8,796	8,796	13,626	13,626

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Only cells in non-OECD countries are included.

9 Subgroup Analyses: Regime Type

Regime type shapes the risk of contesting state policy. As a result, transnational borderland communities in autocracies may not have resisted even threatening closures. To test this possibility, I use Regimes of the World data by the Varieties of Democracy (V-Dem) project (Herre, 2021) to divide the sample into borderland communities in democracies (either electoral democracy or liberal democracy) or borderland communities in non-democracies (either a closed autocracy or electoral autocracy). The consistent finding among both subgroups is still that Transnationality has positive and significant association with Resistance.

This section replicates the primary analyses of Transnationality and Resistance presented in the main body of the paper but after dividing the sample into cells in either democracies or non-democracies. The first set of tables includes models among democracies, and the second set of tables includes models among non-democracies. The note in each table indicates the grid cell size. All results are substantively similar to the primary analyses.

Table 47: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.82***	3.74***	3.73***	3.59***	1.80***	1.62***
	(0.27)	(0.28)	(0.26)	(0.27)	(0.18)	(0.19)
Population	0.67***	0.66***	0.63***	0.62***	0.56***	0.55***
	(0.08)	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)
Natural Resources	0.42	0.42	0.37	0.40	0.79*	0.70
	(0.47)	(0.47)	(0.45)	(0.45)	(0.47)	(0.46)
Ruggedness	−0.71***	−0.68***	−0.64***	−0.59**	−0.74***	−0.58***
	(0.24)	(0.24)	(0.23)	(0.23)	(0.19)	(0.19)
Capital Distance	1.89**	1.89**	1.22**	1.20**	0.68	0.66
	(0.83)	(0.83)	(0.50)	(0.50)	(0.53)	(0.52)
Proximate Event		0.22		0.44**		1.24***
		(0.20)		(0.20)		(0.19)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	21,178	21,178	27,035	27,035	27,805	27,805

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Only cells in democracies are included.

Table 48: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.74***	3.76***	3.56***	3.49***	1.57***	1.46***
	(0.29)	(0.30)	(0.28)	(0.29)	(0.19)	(0.20)
Population	0.86***	0.86***	0.78***	0.78***	0.71***	0.73***
	(0.12)	(0.12)	(0.10)	(0.10)	(0.10)	(0.10)
Natural Resources	0.80*	0.80*	0.65*	0.64*	0.97**	0.80**
	(0.41)	(0.41)	(0.38)	(0.38)	(0.38)	(0.39)
Ruggedness	−0.74***	−0.74***	−0.65***	−0.63***	−0.71***	−0.59***
	(0.26)	(0.26)	(0.24)	(0.24)	(0.20)	(0.20)
Capital Distance	1.72**	1.72**	1.23**	1.21**	0.55	0.52
	(0.81)	(0.81)	(0.50)	(0.50)	(0.53)	(0.52)
Proximate Event		−0.06		0.23		1.04***
		(0.20)		(0.19)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	10,743	10,743	13,839	13,839	14,173	14,173

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Only cells in democracies are included.

Table 49: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.35***	3.41***	3.19***	3.17***	1.46***	1.37***
	(0.30)	(0.31)	(0.29)	(0.29)	(0.20)	(0.20)
Population	0.91***	0.91***	0.86***	0.86***	0.72***	0.74***
	(0.14)	(0.14)	(0.13)	(0.13)	(0.12)	(0.12)
Natural Resources	0.47	0.48	0.38	0.38	0.84**	0.70*
	(0.41)	(0.41)	(0.37)	(0.37)	(0.39)	(0.39)
Ruggedness	−0.55**	−0.57**	−0.45*	−0.44*	−0.59***	−0.49**
	(0.26)	(0.26)	(0.24)	(0.24)	(0.20)	(0.20)
Capital Distance	1.47*	1.48*	0.98**	0.97**	0.25	0.22
	(0.76)	(0.77)	(0.49)	(0.49)	(0.52)	(0.51)
Proximate Event		−0.20		0.04		0.84***
		(0.21)		(0.20)		(0.18)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	6,672	6,672	8,612	8,612	8,842	8,842

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Only cells in democracies are included.

Table 50: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	3.18***	3.48***	3.04***	3.20***	1.82***	1.86***
	(0.49)	(0.50)	(0.47)	(0.48)	(0.39)	(0.40)
Population	0.07	0.10	0.08	0.09	0.05	0.05
	(0.06)	(0.07)	(0.06)	(0.06)	(0.05)	(0.05)
Natural Resources	2.11***	2.19***	2.18***	2.24***	2.46***	2.52***
	(0.47)	(0.48)	(0.46)	(0.47)	(0.43)	(0.43)
Ruggedness	−0.15	−0.24	−0.07	−0.09	0.28	0.28
	(0.37)	(0.38)	(0.35)	(0.35)	(0.27)	(0.28)
Capital Distance	−4.66**	−5.26**	−0.55	−0.45	−1.85**	−1.90**
	(2.09)	(2.15)	(0.98)	(1.00)	(0.86)	(0.86)
Proximate Event		−16.01		−17.32		−14.44
		(554.46)		(1,563.04)		(565.70)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	10,251	10,251	15,907	15,907	31,733	31,733

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 20x20 KM grid cells. Intercepts are omitted.
Only cells in non-democracies are included.

Table 51: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	2.63***	3.03***	2.49***	2.64***	1.41***	1.41***
	(0.49)	(0.52)	(0.47)	(0.48)	(0.39)	(0.39)
Population	0.22**	0.25**	0.20**	0.21***	0.13**	0.13**
	(0.10)	(0.11)	(0.08)	(0.08)	(0.06)	(0.06)
Natural Resources	1.38***	1.47***	1.44***	1.49***	1.75***	1.75***
	(0.47)	(0.47)	(0.46)	(0.47)	(0.43)	(0.43)
Ruggedness	−0.20	−0.22	−0.08	−0.08	0.26	0.26
	(0.36)	(0.36)	(0.34)	(0.34)	(0.27)	(0.27)
Capital Distance	−4.84**	−5.55***	−0.73	−0.69	−2.08**	−2.07**
	(2.09)	(2.15)	(1.00)	(1.02)	(0.89)	(0.89)
Proximate Event		−1.68**		−0.90		0.13
		(0.71)		(0.65)		(0.62)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	5,196	5,196	8,117	8,117	16,222	16,222

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 30x30 KM grid cells. Intercepts are omitted.
Only cells in non-democracies are included.

Table 52: Transnationality and Resistance Against COVID-19 Border Closures (Logit)

	Dependent variable: ACLED Event					
	(1)	(2)	(3)	(4)	(5)	(6)
Transnationality	2.80***	3.05***	2.63***	2.71***	1.41***	1.40***
	(0.52)	(0.53)	(0.49)	(0.50)	(0.39)	(0.39)
Population	0.14	0.16	0.14*	0.15*	0.10	0.10
	(0.09)	(0.10)	(0.08)	(0.08)	(0.06)	(0.06)
Natural Resources	1.57***	1.65***	1.68***	1.72***	1.91***	1.89***
	(0.42)	(0.43)	(0.42)	(0.42)	(0.39)	(0.39)
Ruggedness	−0.11	−0.14	0.01	0.01	0.28	0.28
	(0.36)	(0.36)	(0.34)	(0.34)	(0.27)	(0.27)
Capital Distance	−5.27**	−6.10***	−0.75	−0.78	−2.14**	−2.08**
	(2.17)	(2.25)	(1.02)	(1.03)	(0.89)	(0.90)
Proximate Event		−1.20**		−0.55		0.37
		(0.55)		(0.51)		(0.50)
Borderland Side FEs	✓	✓				
Borderland FEs			✓	✓		
Country FEs					✓	✓
N	3,235	3,235	5,073	5,073	10,123	10,123

*p < .1; **p < .05; ***p < .01
Note: Unit of analysis is 40x40 KM grid cells. Intercepts are omitted.
Only cells in non-democracies are included.

10 ACLED Data Codebook

Codebook for Coding ACLED Events

Version: December 13, 2023

Variable Description (column name)

This document describes instructions for coding the content of descriptions about protest and riot events that have been documented by the Armed Conflict Location and Event Data Project (ACLED).

ID of the Row (row_id)

The ID of the row.

ID of the Event (EVENT_ID_CNTY)

The ID of the event.

Date of the Event (EVENT_DATE)

The date on which the event took place.

Country of the Event (COUNTRY)

The name of the country in which the event took place.

Administrative Region 1 (ADMIN1)

The name of the largest subnational administrative region in which the event took place.

Administrative Region 2 (ADMIN2)

The name of the second largest subnational administrative region in which the event took place.

Administrative Region 3 (ADMIN3)

The name of the third largest subnational administrative region in which the event took place.

Name of the Coder (coder)

The last name of the coder.

Text of the Event Description (NOTES)

The text of the event description.

Relevant to Border Control (relevant)

Is the event relevant to one or more border control efforts? An event is relevant to border control efforts when the fundamental purpose of the event directly relates to border control. Here, border control efforts are defined as any effort by a state at or

around its international land borders to facilitate or prevent the entrance of people or goods into its territory. Border control efforts in this variable encompass different types, including but not limited to the construction of physical infrastructure near a border such as walls; the deployment of guards to a border area; and restrictions on authorized movement through official crossings at land borders, including more stringent requirements to pass through a crossing and the temporary closure of individual crossings or an entire border. Note that the focus of this variable is on efforts by *states* at *international* borders on *land*. Thus, this variable excludes events that are about otherwise similar actions at subnational borders, maritime borders, and international airports, or that are taken by non-state actors like rebel groups and vigilantes.

Finally, note a few features of this variable. First, the participants of an event being part of a state agency or social group that is indirectly connected to or impacted by border control efforts does not in and of itself mean that the event is relevant to border control. The fundamental purpose of the event has to directly concern border control efforts in order for the event to be considered relevant. This criterion means that events like the following should *not* be treated as relevant to border control: people from a different country gather at an embassy of their home government to demand that they be repatriated; migrants in a detainment center protest against the conditions in which they are being held; or truckers demonstrate in frustration about delays when traversing borders because too few personnel work border crossings. Second, an event taking place near a border does not in and of itself mean that the event is relevant to border control. Third, an event could be relevant to border control efforts by either one state or joint efforts by multiple states. Fourth, an event that is simultaneously relevant to border control and other issues should still be coded as relevant to border control. Fifth, events that are related to movement restrictions in Cyprus or between Israel and Palestine should not be treated as relevant to border control.

- Code 1: the event is relevant to border control.
- Code 0: the event is not relevant to border control.

Relevant to Border Control Confidence (relevant_conf)

This variable denotes the degree of confidence that the coder has in their coding of this variable.

- Code 3 (high): this evidence is very strong, alternative interpretations are unlikely, and you are quite sure that others would agree with your assessment.
- Code 2 (medium): there is good evidence for the judgment, but alternative interpretations are possible.
- Code 1 (low): you are almost guessing.

Relevant to Crossing Restrictions (relevant_restrictions)

If the event is relevant to border control (relevant = 1), is it relevant specifically to restrictions on formal movement through official border crossings? The purpose of this variable is to identify, among all events that are relevant to any kind of border control, those whose fundamental purpose directly relates to restrictions at official border crossings. Not all events that are generally relevant to border control are specifically relevant to crossing restrictions, but all events that are relevant to crossing restrictions are generally relevant to border control. Thus, restrictions at official crossings do *not* encompass other types of border control efforts (e.g. walls or armed patrols in other locations to target unauthorized/"illegal" movement). Note that an event can be simultaneously relevant to crossing restrictions and other types of border control efforts.

Restrictions can apply to people or goods. They can take two forms. The first form is the implementation of more stringent requirements to pass through a border crossing. An example of this is mandating the possession of a medical document. The second form of limitation is the temporary closure of official border crossings, spanning from particular site to those along an entire border. Leave this variable blank if the event is not relevant to border control (relevant = 0).

- Code 1: the event is relevant to restrictions on formal movement through official border crossings.
- Code 0: the event is not relevant to restrictions on formal movement through official border crossings.
- Leave blank: relevant is 0, meaning that the event is not at all relevant to border control.

Relevant to Crossing Restrictions Confidence (relevant_restrictions_conf)

This variable denotes the degree of confidence that the coder has in their coding of this variable.

- Code 3 (high): this evidence is very strong, alternative interpretations are unlikely, and you are quite sure that others would agree with your assessment.
- Code 2 (medium): there is good evidence for the judgment, but alternative interpretations are possible. An example description for which a coder might have moderate confidence is that a group of people march to an international border crossing in protest of "coronavirus-related restrictions", but without specifying the type of restriction.
- Code 1 (low): you are almost guessing.

Specific Border(s) Referenced (specific)

If the event is relevant to border control (relevant = 1), does its description refer to one or more particular international land borders? Some event descriptions refer to specific borders explicitly by name, while others use indirect references. These indirect references can take two forms. One form is referring to specific elements of a

border such as the name of a port of entry, checkpoint, or bridge. The other form of indirect reference is broad terms such as "nearby border". When an event description potentially contains an indirect reference, search for additional information online to confirm whether this is the case. If the online search supports interpretating the language as an indirect reference, then the event description should be treated as referring to a specific border. Note that references to specific borders should all be treated the same, whether or not the referenced border is a border of the country in which the event took place. Leave this variable blank if the event is not relevant to border control (relevant = 0).

- Code 1: the event description refers to at least one international land border.
- Code 0: the event description does not refer to any international land borders.
- Leave blank: relevant is 0, meaning that the event is not at all relevant to border control.

Specific Border(s) Named Confidence (specific_conf)

This variable denotes the degree of confidence that the coder has in their coding of this variable.

- Code 3 (high): this evidence is very strong, alternative interpretations are unlikely, and you are quite sure that others would agree with your assessment.
- Code 2 (medium): there is good evidence for the judgment, but alternative interpretations are possible. In general, select this level of confidence when an event is coded as referring to one or more specific borders (specific = 1) based on an indirect reference.
- Code 1 (low): you are almost guessing.

Specific Border(s) Referenced Free-responses (specific_free_1, specific_free_2, specific_free_3, specific_free_4)

If the event references one or more specific borders (specific = 1), which *neighboring countries* are associated with those borders? These variables are intended to capture, if possible, the neighboring country linked to the specific borders involved in the event. Start by noting the entry in the COUNTRY column, which is the name of the country in which the event took place. Then, for the specific_free variables, input the name of the country on the side of the border in which the event did *not* occur. For example, if an event in Country A is relevant to border control efforts at the border with Country B, then the free-response should contain the name of Country B in specific_free_1. Only input the name of the neighboring country rather than the name of more specific references like border crossings, checkpoints, and bridges. Fully spell out the name of the country, and keep that spelling choice consistent across events. In case an event description references more than one border, multiple columns are provided. Enter only one country name per column, and only fill as many columns as there are countries to specify. For example, if an event in Country A is relevant to

border control efforts at the borders of Country A with both Country B and Country C, then the free-responses should contain the name of Country B in specific_free_1 and the name of Country C in specific_free_2. Note that, if a referenced border is not a border of the country in which the event took place, still input the name of each country associated with the reference. Leave all of these variables blank if the event is not relevant to border control (relevant = 0), or if the event is relevant but does not refer to any specific borders (relevant = 1 and specific = 0).

- Free-response: enter the name of each bordering country.
- Leave all blank: relevant is 0, meaning that the event is not relevant to border control, or relevant = 1 and specific = 0, meaning that the event is relevant to border control but does not refer to specific borders.

Position on Border Control (position)[66]

If the event is relevant to border control (relevant = 1), does it express opposition or support? This variable is intended to capture the position expressed by the event on all of the border control efforts to which it is relevant. The position is indicated by the stated demands of the event and/or the actions taken by event participants. An event opposes border control if it demands the end or reduction of, or takes action to obstruct or defy, one or more border control efforts. An event supports border control if it demands the initiation or intensification of, or takes action to support, one or more border control efforts. Leave this variable blank if the event is not relevant to border control (relevant = 0).

- Code 2: the event opposes border control.
- Code 1: the event supports border control.
- Leave blank: relevant is 0, meaning that the event is not at all relevant to border control.

Position on Border Control Confidence (position_conf)

This variable denotes the degree of confidence that the coder has in their coding of this variable.

- Code 3 (high): this evidence is very strong, alternative interpretations are unlikely, and you are quite sure that others would agree with your assessment.
- Code 2 (medium): there is good evidence for the judgment, but alternative interpretations are possible. An example description for which a coder might have moderate confidence in coding an event relevant to border control as opposed or supportive is that a group of people in a border town drive in a motorcade demanding "authorities take measures to reactivate the border's economy" in the context of a closed border, but without specifying the type of measures.

[66] The codebook originally instructed a coding of 3 for events that simultaneously opposed and supported different forms of border control. But I have removed this from the codebook in the interest of brevity since no events fell under that category.

- Code 1 (low): you are almost guessing.

Position on Crossings Restrictions (position_restrictions)[67]

If the event is relevant to restrictions on formal movement through official land border crossings (relevant_restrictions = 1), does it express opposition or support? This variable is intended to capture the position expressed by the event specifically on the one or more crossings restrictions to which it is relevant. The position is indicated by stated demands and/or actions taken by event participants. An event opposes restrictions if it demands the end or reduction of, or takes action to obstruct or defy, one or more restrictions. An event supports restrictions if it only demands the initiation or intensification of, or takes action to support, one or more border restrictions. Leave this variable blank if the event is not relevant to restrictions on formal movement through official land border crossings (relevant_restrictions = 0).

- Code 2: the event opposes restrictions on formal movement through official land border crossings.
- Code 1: the event supports restrictions on formal movement through official land border crossings.
- Leave blank: relevant_restrictions is 0, meaning that the event is not at all relevant to restrictions on formal movement through official land border crossings.

Position on Crossings Restrictions Confidence (position_restrictions_conf)

This variable denotes the degree of confidence that the coder has in their coding of this variable.

- Code 3 (high): this evidence is very strong, alternative interpretations are unlikely, and you are quite sure that others would agree with your assessment.
- Code 2 (medium): there is good evidence for the judgment, but alternative interpretations are possible.
- Code 1 (low): you are almost guessing.

[67] The codebook originally instructed a coding of 3 for events that simultaneously opposed and supported different restrictions on formal movement through official land border crossings. But I have removed this from the codebook in the interest of brevity since no events fell under that category.

11 Interview Questionnaires

Note that the open-ended nature of the questions and some interviewees occupying multiple positions led some discussions to vary in question order, scope, and topic.

11.1 Government Officials

1. Name, birthplace, and current place of residence?
2. What is your background?
3. How did you come to your position?
4. Could you describe your community's relationship to the border?
5. In what ways is your community connected to society across the border?
6. For your community, what is good about being near the border?
7. For your community, what is bad about being near the border?
8. Which border policies have been the most significant for your community? For each mentioned policy:
   (a) How does the policy impact the community?
   (b) Does the policy affect everyone equally?
   (c) Who supports the policy?
   (d) Who opposes the policy?
   (e) What political activism or pressure have occurred over the policy?
   (f) How have government authorities responded to these activities?
9. If COVID-19 border policy was not mentioned:
   (a) How did COVID-19 crossing restrictions impact people in your community?
   (b) Did the restrictions affect everyone equally?
   (c) Who supported the restrictions?
   (d) Who opposed the restrictions?
   (e) What political activism or pressure occurred over the restrictions?
   (f) How did government authorities respond to these activities?
10. Could you describe the local government's relationship with state and federal authorities regarding border issues?
11. Could you describe any conflicts that have occurred between local government and the other authorities?

12. What do people from outside the border area get right and get wrong about border issues?
13. Additional interviewees?

11.2 Businesspeople

1. Name, birthplace, and current place of residence?
2. What is your background?
3. How did you come to be involved in the business?
4. Could you describe your business's relationship to the border?
5. For your business, what is good about being near the border?
6. For your business, what is bad about being near the border?
7. Which border policies have been the most significant for your business?
8. For each mentioned policy:
   (a) How does this policy impact your business?
   (b) In what ways have you engaged with government officials about this policy?
9. If COVID-19 border policy was not mentioned:
   (a) How did COVID-19 crossing restrictions impact your business?
   (b) In what ways did you engage with government officials about the restrictions?
10. What do people from outside the border area get right and get wrong about border issues?
11. Additional interviewees?

11.3 Activists

1. Name, birthplace, and current place of residence?
2. What is your background?
3. How did you come to be involved in your organization?
4. When and where did your organization form?
5. Where does your organization currently operate?
6. Which border policies have been the biggest priority for your organization?

7. For each mentioned policy:
    (a) How does the policy impact people in border area communities?
    (b) Does the policy affect everyone equally?
    (c) What is your organization's stance on the policy?
    (d) What kinds of political action has your organization taken over the policy?
8. If COVID-19 border policy was not mentioned:
    (a) How did COVID-19 crossing restrictions impact people in border area communities?
    (b) Did the restrictions affect everyone equally?
    (c) What was your organization's stance on the restrictions?
    (d) What kinds of political action did your organization take over the restrictions?
9. What kinds of people and groups make up your organization's support network?
10. What strategies do you find to be the most effective when trying to mobilize the public?
11. Could you describe your organization's experiences with engaging local, state, or federal officials?
12. What do people from outside the border area get right and get wrong about border issues?
13. Additional interviewees?

12 Ethics and Research Practices

The interview component involving human research subjects fully adheres to the Principles and Guidance for Human Subjects Research established by the American Political Science Association Council. Each component is addressed below.

Informed and voluntary consent of research participants and others directly engaged by the research process, including continuing consent if needed: All interviewees provided informed and voluntary consent to participate in the research. I obtained this verbally at the beginning of each interview. Each interview began with me discussing and providing a printed copy of the consent form mandated by my home institution's Institutional Review Board. Consent was meaningful and sufficient because I detailed the nature of the research, provided the physical form, took care to affirm that their anonymity would be protected, and ensured that I received a clear, verbal affirmation of consent.

Deceptive or covert research should be avoided: No deception or covert research was used in the course of the interview data collection.

Harm (traumatization, social, economic or physical) should be avoided, minimized when avoidance is not possible, and research suspended if excessive: Because the in-person interviews occurred at a time and place of subjects' choosing and because virtual interviews took place on a computer, participation posed no physical risks to subjects. None of the information obtained about the subjects could lead to social, economic, legal, or information harm if released, and as the information will be collected anonymously, the risk of disclosure is mitigated in any case. All statements individuals are exposed to are similar to that encountered in standard news reports and social media.

The confidentiality of participant identities, or, in some settings, the higher standard of anonymity: I took multiple steps to safeguard subjects' information. To ensure that I could keep track of subject interviewees, I maintained a password-protected spreadsheet in an encrypted file on my personal computer. In this spreadsheet, I assigned all of these subjects an ID number that I used as a link to names. In my personal notebook that I used in interviews, I wrote down subjects' ID numbers made via this method rather than their names to track which notes associate with whom. This ensured that accidentally losing the interview notebook would not reveal subjects' names or interview responses in case an unauthorized individual accessed the notebook. Overall, the names, contact information, and ID numbers will not be made publicly available or shared with someone other than myself.

Compromising the integrity of broad political processes either at the time of the research process or on publication without the consent of those directly engaged by the research process should be avoided: The research did not compromise the integrity of broad political processes, and would not do so upon publication. The research involving human subjects consisted only of asking the subjects for their opinions on and experiences with a set of political issues.

Review by relevant ethics boards to approve the research protocol, confirm exempt status, or confirm that the research is Not Human Subjects Research (NHSR) (Note that this also includes local review when required by host community or host country.): The Institutional Review Board of my home institution confirmed exempt status of the research and approved all research procedures.

Awareness of relevant laws and regulations governing research and related activities: The research did not involve violating any laws or regulations governing research and related activities.