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Permalink https://escholarship.org/uc/item/0vr8d3f2

Journal The Journal of Politics, 85(1)

ISSN 0022-3816

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Publication Date

DOI

10.1086/720311

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Local Politics, Global Consequences: How Structural Imbalance in Domestic Political Networks Affects International Relations

Short title: Domestic Political Networks and International Relations

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Abstract

When do domestic events affect international relations? Our answer to this puzzle emphasizes patterns of interaction in domestic networks. Leaders depend on coalitions of subnational actors—civilians, parties, militaries, and so on—for political survival. *Structural imbalance* emerges when the higher-order relations of subnational actors contradict their revealed preferences, such as when actors cooperate with enemies of friends or conflict with friends of friends. Imbalance generates uncertainty about the preferences and future behaviors of subnational actors, which in turn diminishes the government's confidence in domestic coalitions. Imbalance thus increases the probability that leaders will turn to survival strategies, such as manipulating foreign relations in order to show competence. At the same time, foreign governments respond to imbalance by implementing preventive measures or intervening for strategic gain. We develop and test these arguments from a "networks of networks" approach. We introduce generalizable metrics of structural imbalance and foreign-relations shifts. Extensive empirical analysis shows that the greater the imbalance generated by domestic events, the greater the probability that those events will affect foreign relations.

Keywords: Domestic politics and international relations; multiplex networks; network analysis; structural imbalance; event data

Supplementary material for this article is available in the appendix in the online edition. Replication files are available in the JOP Dataverse (https://dataverse.harvard.edu/dataverse/jop). The empirical analysis has been successfully replicated by the JOP replication analyst. The replication files and appendix can also be accessed at https://dataverse.harvard.edu/dataverse/bkinne. This study was supported by grant #W911NF15-1-0502-0 of the Army Research Office (ARO). The opinions and statements in this article are those of the authors and do not reflect the views of the Department of Defense or the ARO.

Disruptive domestic political events often generate ripple effects that spread far beyond their countries of origin. The 2004 Madrid train bombing culminated in the Spanish government's withdrawal from the US-led military coalition in Iraq. The Syrian civil war led to embassy closures and the Syrian government's expulsion from numerous international organizations. The recent Euromaidan revolution prompted not only a shift in Ukraine's policies toward the EU but also opportunistic Russian interventions into Ukrainian territory. At their most extreme, domestic events result in dramatic shifts in foreign relations. These shifts affect both the afflicted country's outward policies and the treatment of that country by foreign governments.

Most research on the relationship between domestic and international politics focuses on systematic, institutionalized linkages (Bueno de Mesquita and Smith 2012; Fearon 1998). While such linkages illuminate general policymaking processes, they provide little guidance in understanding the more immediate, and often unanticipated, international consequences of disruptive politics.

When do domestic events affect a country's external relations? Our answer to this question emphasizes patterns of interaction within networks of domestic actors—incumbent governments, political parties, militaries, civilians, opposition movements, and others. We focus on *structural imbalance*, a concept from network science that reflects inconsistencies in actors' social relations (Cartwright and Harary 1956; Heider 1958). Structural imbalance emerges when domestic actors make choices that seemingly contradict their revealed preferences. For example, they conflict with actors who should be their partners, such as friends of friends or enemies of enemies, or they cooperate with enemies of friends or friends of enemies.

Leader survival requires coalitions of disparate subnational actors. Imbalanced relations obfuscate the preferences and strategies of those actors. When political ties are inconsistent and contradictory, friend-versus-foe distinctions erode, and future behaviors become unpredictable. Imbalance thus diminishes the incumbent government's confidence in the domestic coalitions it depends upon for survival. This uncertainty incentivizes leaders to implement survival strategies, such as making concessions on international issues or manipulating foreign ties to show competence. Structural imbalance also incentivizes foreign governments to shift their own ties with the focal state—for example, by taking actions to prevent imbalance from diffusing into their own politics, or by intervening in an unstable neighbor for political gain. The greater the imbalance generated by domestic events, the greater the probability those events will affect foreign relations.

Our argument offers several theoretical innovations. First, we adopt a "networks of networks" perspective (D'Agostino and Scala 2014; Kinne and Bunte 2020; Maoz 2010). We conceptualize states as containing domestic networks comprised of interactions among key subnational actors. Each state is in turn embedded in a global network of interactions between governments. While much scholarship examines network phenomena at the international level (Hafner-Burton and Montgomery 2009; Kinne 2013), we explore network interactions across levels of analysis. Second, we propose a simple two-part framework that links domestic imbalance to external outcomes. *Projection* mechanisms involve deliberate efforts by a focal government to manipulate its foreign ties, while *reaction* mechanisms involve policies directed by other governments toward the focal government. Third, we develop the concept of a *foreign-relations shift*—a rapid, significant change in a government's behavior toward other governments (projection) or in the behaviors of other countries toward the focal government (reaction). These shifts entail a wide range of both conflictual and cooperative interactions. While political scientists often focus on macro-level reorientations in foreign policy, we explore the more immediate elasticity between domestic events and international outcomes. As defined here, shifts represent substantial deviations from "normal politics" that materialize in a matter of weeks or days.

Empirically, we assess whether imbalance in domestic political networks increases the probability of shifts in foreign relations. We use high-resolution weekly event data to generate longitudinal multiplex networks at both the domestic and intergovernmental levels. We employ a new metric for multiplex network imbalance (Burghardt and Maoz 2020), and we introduce a dynamic method to endogenously detect foreign-relations shifts. Extensive country-week analysis, combined with out-of-sample prediction and counterfactual analysis of historical cases, reveals a highly robust relationship between domestic imbalance and shifts in foreign relations.

Existing Literature

Domestic and international politics are inextricably linked (Maoz 1996). Scholars have extensively studied the relationship between domestic institutions and international outcomes (e.g., Bueno de Mesquita, Smith, Siverson and Morrow 2003; Leeds 1999; Milner 1997; Smith 1998). We are instead interested in the immediate impact of disruptive events on a country's foreign relations. Research in this area is fractured. Scholars typically focus on a single domestic variable—such as leadership turnover (Wolford 2007), revolutions (Colgan 2013), or civil wars (Gleditsch, Salehyan and Schultz 2008)—and a single external outcome, such as militarized disputes. The extensive literature on diversionary war has examined the effects of riots and protests (Nicholls, Huth and Appel 2010), coup vulnerability (Powell 2014), state-sponsored media (Alrababa and Blaydes 2021), and diverse other phenomena, but this research limits its purview to external uses of force.

Some scholars have considered dependent variables other than conflict. Ghosn (2011) links domestic unrest to bilateral negotiations, and Mattes, Leeds and Carroll (2015) link leadership turnover to voting at the UN General Assembly. However, such lines of inquiry remain uncommon. Davis and Ward (1990) and Moore (1995) use event data to analyze the conflict nexus among governments, domestic factions, and external actors, but only for individual countries. These studies are notable for considering both outward relations and the reactions of foreign governments.

Analyses of shifts in foreign relations, beyond singular behaviors like uses of force, tend to focus on macro-level questions of grand strategy and systemic change (Thompson 2016), with a bias toward studying "fundamental redirections in a country's foreign policy" (Hermann 1990: 5). These perspectives ignore more fine-grained questions about the immediate impact of domestic events. Further, despite notable exceptions (e.g., Davies 2016), most studies utilize country-year observations. Such highly aggregated data face a difficult task in modeling the temporal sequences that link rapidly evolving domestic political issues to external outcomes. Disruptive events often materialize quickly and can affect governmental policy in a matter of weeks or days.

Our approach builds on recent network studies of internal conflict, which emphasize the role of network structure in generating conflict behavior (Dorff, Gallop and Minhas 2020; Metternich,

Dorff, Gallop, Weschle and Ward 2013). That literature focuses strictly on conflict, and it incorporates connections between internal groups and outside actors only as control variables (though see Jackson, San-Akca and Maoz (2020)). By contrast, we study general patterns of interaction among all domestic actors, and we examine external relations as the main outcome of interest.

We draw on structural balance theory, originally developed in psychology to explain abnormal behaviors (Heider 1946) and extended to networks by Harary (1953) and Cartwright and Harary (1956). Structural balance theory is now a core subfield of network science (e.g., Facchetti, Iacono and Altafini 2011). Most applications of balance theory to international relations conceptualize imbalance in terms of friendship and enmity between states (e.g., Doreian and Mrvar 2015; Lerner 2016; McDonald and Rosecrance 1985; Moore 1979). Maoz, Terris, Kuperman and Talmud (2007) find that structural imbalance at the international level affects the probability of dyadic conflict. Burghardt and Maoz (2020) show that imbalance correlates with joint democracy, relative capabilities, distance, and reputation. To the best of our knowledge, no existing research links domestic imbalances to international outcomes.

This review suggests that, while each aspect of this study has received some attention in the literature, the merging of domestic political networks and structural balance approaches with short-term shifts in foreign relations offers a meaningful, integrative framework for understanding linkages between domestic politics and international outcomes.

A Network Theory of Domestic Events and Foreign Relations

We argue that domestic political events primarily affect foreign relations when those events generate imbalance among domestic actors. This effect may involve *projection*, where the focal state experiencing imbalance alters its relations with foreign governments. Or it may involve *reaction*, where foreign governments alter their relations in response to imbalance within a focal state.

Figure 1 illustrates our "networks of networks" approach (D'Agostino and Scala 2014; Kinne and Bunte 2020; Maoz 2010). Each country contains a *domestic political network* consisting of subnational actors or "nodes" connected by a set of interactions or "edges." To differentiate various types of subnational actors, we rely on the widely used Conflict and Mediation Event Observations



Figure 1: Domestic and Intergovernmental Networks

Note: Large nodes are countries. Nested nodes are subnational actors. Solid edges are cooperative events. Dashed edges are conflictual intergovernmental events. GOV=government, MIL=military, REB=rebel, OPP=opposition, PTY=party, COP=police, JUD=judiciary, SPY=intelligence, IGO=international organization, MED=media, EDU=education, BUS=business, CVL=civilian, OTH=unspecified. Agent codes based on Schrodt (2012).

(CAMEO) framework, which provides an exhaustive set of actor codes that are applicable to all countries (Gerner, Schrodt, Yilmaz and Abu-Jabr 2002; Schrodt 2012). Thus, rather than ex ante restricting the analysis only to specific actors, we simply include all actors that appear in our data source, with each actor assigned to one of the primary agent codes in Figure 1. The *intergovernmental political network* consists of sovereign governments (GOV) and their respective interactions. The online appendix describes both sets of networks in greater detail.

Interactions between nodes are either cooperative or conflictual. Examples of domestic interactions include acceding to demands for political rights (cooperative) or engaging in violent protest (conflictual). Interactions at the intergovernmental level might involve signing a treaty (cooperative) or imposing an embargo (conflictual). The CAMEO framework identifies over 300 unique interactions (Schrodt 2012), which can be binned into four mutually exclusive categories or "quad codes": (1) verbal cooperation, (2) material cooperation, (3) verbal conflict, and (4) material conflict.

While most network research addresses a single relation, we examine multiple relations simultaneously. Figure 2 illustrates a "multiplex" domestic network, where layers correspond to quad codes. Within each layer, the edge between a particular i node and j node reflects ij interactions



Figure 2: A Multiplex Domestic Political Network

Full multiplex

Note: Nodes are domestic actors. Solid edges are cooperative events. Dashed edges are conflictual events. *Left:* A multiplex with four layers. *Right:* Reduction of the multiplex to valued cooperative and conflictual edges.

of that event type. The right-side panel in Figure 2 reduces the multiplex to a flat network, where edge values reflect the summed value of the edges in the associated layers of the multiplex. The intergovernmental network is similarly a multiplex of conflictual and cooperative ties.

Political Uncertainty and Structural Imbalance

Politics is ultimately about competition and cooperation between groups (Riker 1962). Some scholars focus on executives, legislatures, interest groups, and other traditional categories (Milner

1997), while others look to more abstract groupings like selectorates and winning coalitions (Bueno de Mesquita et al. 2003). Even in personalist regimes, governance depends upon cadres of influential elites (Weeks 2012). All of these perspectives assume that political survival requires coalitions of disparate social, political, and economic actors, which may involve explicit support from key actors (e.g., in cabinets), or the tacit support of civilians, militaries, security forces, and opposition parties. To encompass the many potential forms that these coalitions take, our theory incorporates the full variety of domestic actors represented in Figure 1.

Uncertainty about the preferences and future behavior of subnational actors raises the specter of defection and threatens coalition stability (Wright and Goldberg 1985). Democratic leaders are sensitive to declines in public support, while leaders in authoritarian systems worry about violations of the "loyalty norm" that ensures elite support (Bueno de Mesquita et al. 2003). All leaders favor predictability, where subnational actors "restrict themselves to the behavior patterns that fall within the limits imposed by political role expectations" (Ake 1975: 273). Uncertainty deprives political actors of "expectation, planning, a sense of regularity" (Margolis 2010: 331), potentially posing more of a challenge to governance than do conflicting preferences (Wright and Goldberg 1985).

Structural imbalance introduces uncertainty and stress into a system. The concept of imbalance connects to a long tradition of defining the stability of political systems in terms of the "basic structural arrangement" of their parts (Hurwitz 1973: 457). Balance theory assumes that actors maintain consistency in their social relations (Cartwright and Harary 1956; Heider 1958). Consider the signed graphs in Figure 3, where cooperative ties (solid/blue) are positive and conflictual ties (dashed/red) are negative. Figure 3(a) reflects the common aphorism "a friend of a friend is a friend," and 3(b) reflects "the enemy of an enemy is a friend." Formally, a triad is balanced if the product of its three edge signs is positive. The bottom panels reflect contradictory social relations, such as "the friend of my friend is an enemy" (3(c)) or "the enemy of an enemy is an enemy" (3(d)). A triad is imbalanced if the product of its three edge signs is positive.

Heider (1946) argued that imbalances "produce tension." Munroe (2007) clarifies: "When patterns of liking and disliking are balanced, structures are stable. When they are imbalanced,

Figure 3: Network Imbalance with Three Nodes



Note: Nodes are domestic political actors. Solid edges are cooperative ties (+). Dashed edges are conflictual ties (-).

structures are unstable and there is pressure to change in the direction that makes them balanced." Scholars have connected imbalance to cognitive dissonance and off-the-equilibrium-path behavior (Hummon and Doreian 2003; Krackhardt and Handcock 2007). Imbalanced social systems tend to "correct" toward balanced equilibria (Doreian, Kapuscinski, Krackhardt and Szczypula 1996).

In political systems, imbalance generates uncertainty regarding the alignments of key actors. Reconsider the right-side panel in Figure 2. In the triad involving the government (GOV), civilians (CVL), and security forces (COP), the latter is on good terms with both civilians and the government (solid/blue lines), but there are negative GOV-CVL ties (e.g. protests, repression). This imbalance raises questions about the loyalty of the state's security apparatus: Will it side with the government, or will it support civilians? Many instances of regime change—such as Tunisia in 2011—hinge on police and militaries transferring support from incumbents to anti-government factions (Albrecht and Ohl 2016). The imbalanced ties of other actors in Figure 2 similarly obfuscate their preferences. The opposition's (OPP) positive ties to the government (GOV) and rebels (REB) suggest both support for the regime and a potential for "disloyal opposition." Imbalance among military (MIL), media (MED), and opposition leaves open many possibilities, such as media coordination with either MIL or OPP in discrediting the third party (cf. Warren 2014). Inconsistent political alignments

leave observers uncertain of an actor's preferences and future behaviors.

While some domestic actors are likely more often involved in imbalanced relations than others, our approach is meant to be generically applicable to a wide range of political systems. For example, although educational actors (EDU) are not commonly associated with political instability, they play a crucial role in countries with a history of student activism, such as Iran. Similarly, in countries where governments depend on the support of foreign corporations, such as Nigeria, business actors (BUS) often exercise outsize influence. Our approach encompasses the many varieties of coalitions that leaders depend upon for survival.

Further, imbalanced relations generate uncertainty even when leaders are not directly involved. Leader survival depends not only on the government's ties to subnational actors, but also on ties among those actors themselves. In autocratic regimes, leaders must cultivate delicate balances of power across swaths of elites (Boix and Svolik 2013; Bueno de Mesquita et al. 2003; Sudduth and Bell 2018). Political survival in Russia, for example, requires coordination between state-owned media (MED), oligarchs (BUS), and judicial bodies (JUD). Imbalance among these actors—or in these actors' ties to potential dissidents, such as opposition parties (OPP), rebels (REB), or civilians (CVL)—may indicate infighting or a shifting loyalties, either of which weakens the incumbent's coalition. For democratic leaders, sociopolitical stability is a crucial source of legitimacy (Lipset 1959; Rothstein 2009). The uncertainty associated with imbalance weakens the domestic audience's confidence in the leader's ability to provide a needed public good (Bueno de Mesquita et al. 2003). For example, corruption scandals in the Ukraine in the 2010s—which deeply affected the public's evaluation of the government-entangled party apparatuses, judicial bodies, corporations, and international organizations. The 2020 George Floyd protests in the US encompassed political action by civilians and student activists, a mix of sympathetic and hostile reactions from police forces, and position-taking by corporations. Below, we disaggregate imbalance by subgroups of actors. We find that although some domestic actors matter more than others, virtually any form of imbalance increases the probability of a shift in foreign relations.

Balance is not synonymous with harmony. Balance promotes social groupings that are stable but

not necessarily "conflict free" (Hummon and Doreian 2003: 17). Civil wars, for example, often ossify into protracted conflicts, where years of fighting eliminate uncertainty about belligerents' goals and capabilities (Walter 2002). We focus on *uncertainty as such*, which is analytically distinct from political violence. While violence might also affect foreign relations, it does so via distinct mechanisms. Further, we do not claim that imbalance always generates uncertainty. Our argument is probabilistic. Uncertainty is a structural phenomenon; when an actor's alignments are contradictory, external observers cannot easily discern that actor's preferences. In some contexts, governments may have additional information that minimizes uncertainty. All else equal, imbalance increases the probability that leaders will face strategic uncertainties that necessitate a response.

Imbalance and Shifts in Foreign Relations

By obscuring the preferences and future behaviors of subnational actors, structural imbalance lowers the government's confidence in the political coalitions it depends upon for survival. The consequences of weakened coalitions are broad. Leaders may face electoral losses or difficulty enacting their agendas, or more extreme outcomes like revolutions. We intentionally leave these consequences open-ended, which ensures that our theory encompasses the varied ways in which uncertainty threatens political survival. As imbalance increases, leaders are more likely to implement strategies that improve their odds of retaining influence (Davies 2016). While some strategies are internal, such as repression (Moore 1998), we focus on strategies that affect external ties.

We define a shift in foreign relations as a *a sudden and significant change in a government's overall political interactions with other governments*. This definition involves three elements. First, "overall political interactions" refers to the full range of a government's ties to other governments, whether conflictual or cooperative. These relations may involve actions toward others (outgoing ties), or they may involve actions by others toward the focal government (incoming ties). Second, "a sudden and significant change" means that a government's interactions deviate dramatically from some established baseline, and this deviation occurs within the span of a few days or weeks rather than months or years. Third, we consider only "interactions with other governments," which restricts the focus to intergovernmental relations.

This definition is flexible regarding the time frame over which a shift occurs. It also allows for shifts in both conflictual and cooperative relations. And it does not invoke exogenous criteria like wars; shifts emerge endogenously from the interactions of governments. We show below that, when operationalized, this definition of shifts correlates strongly with events of agreed-upon importance. Two mechanisms link domestic imbalance to shifts in foreign relations. We discuss each in turn.

Projection. A government plagued by imbalance can increase its odds of political survival by directly manipulating its foreign relations. This incentive exists for at least three reasons. First, in some cases structural imbalance is connected to foreign-policy demands, and shifts in external ties are simply concessions to subnational actors. The leader's actions stabilize domestic coalitions because relevant domestic actors view the leader as supportive of their policy interests. Imbalance in Ukraine in 2013 was rooted, in part, in civilian demands for a policy realignment toward the European Union. Saunders (2015: 488) recounts how Lyndon Johnson used foreign-policy adjustments to appease military elites during the Vietnam War, taking care to "[make] enough concessions to their point of view to keep them on board."

Second, leaders may attempt to alleviate strategic uncertainty by securing external support for example, via consultations with foreign governments, appeals for assistance, or demands for intervention. As Maoz and Henderson (2020: 247) observe, "Cooperative ventures [...] are not only designed to increase national security but also may be designed to help maintain leaders in power." Such efforts are not exclusively cooperative, however; foreign governments often condition their assistance on concessions by the focal government. For example, when Bashar al-Assad appealed to Russia for military aid in his fight against rebels, Moscow demanded unlimited use of Syria's Hmeimim airport and jurisdictional immunity for Russian personnel.

Finally, leaders may shift foreign ties in order to inflate perceptions of policy success. Diplomatic achievements signal competence to domestic audiences (Smith 1998). Fearon (1998: 303) emphasizes the allure of "foreign policy adventurism for the sake of keeping the leader in power rather than advancing the foreign policy interests of the public." From the perspective of domestic actors, apparent policy successes can rally popular support or, at minimum, divert attention from domestic crises (Tarar 2006). This logic is not limited to uses of force (Leeds 1999: 987). Audiences also respond to treaty commitments (Tingley and Tomz 2020), diplomatic visits (Darcy and Richman 1988), and reconciliation with adversaries (Mor 1997). When structural imbalance increases uncertainty around the preferences of subnational actors, purposeful shifts in external relations offer a viable strategy for signaling competence and solidifying support.

Reaction. Structural imbalance also increases the probability of shifts in the actions of foreign governments for at least two reasons. First, disruptive events pose a risk of spillover into other countries (Buhaug and Gleditsch 2008). Scholars have documented spillovers with regard to revolutionary rhetoric (Colgan 2013), refugee flows (Salehyan and Gleditsch 2006), and communication technology (Garcia and Wimpy 2016). If foreign governments believe that imbalance elsewhere presages broader instability, they may implement preventive measures, ranging from cooperation with the focal government (e.g., aid or military support) to more coercive tactics (e.g., sanctions or demands for policy change). Reactions to the Arab Spring illustrate this range of strategies. Saudi Arabia opted to provide financial assistance to Egypt and pushed for Morocco and Jordan to join the Gulf Cooperation Council (Kamrava 2012). Qatar, by contrast, provided financial, logistical, and military support to anti-Qaddafi rebels in Libya (Khatib 2013).

Second, foreign governments may seize on opportunities to engage in direct intervention (Regan and Meachum 2014). Structural imbalance weakens domestic coalitions, which handicaps the focal government's ability to mobilize against external threats. Opportunistic neighbors can exploit these weaknesses to levy demands, extract concessions, support rebel factions, seize control of resources and territory, or simply exacerbate existing tensions. Iraq's initiation of the Iran-Iraq War following the Iranian revolution is a stark example of such opportunism. Russia's efforts at using social media to exploit socio-political tensions in Western societies offers a more subtle example.

This discussion yields a single hypothesis. Imbalance generates uncertainty around the goals and future behaviors of subnational actors. The focal government implements survival strategies, such as granting concessions, securing external support, and/or signaling policy competence. Foreign leaders implement preventive policies and/or seize on opportunities for intervention. Thus:

H1: Structural imbalance in a country's domestic political network increases the probability of a shift in that country's outgoing and/or incoming intergovernmental ties

Data and Research Design

We use data from the Integrated Crisis Early Warning System (ICEWS) to implement weekly "event networks" at the domestic and intergovernmental levels (Boschee, Lautenschlager, O'Brien, Shellman, Starz and Ward 2019). The appendix discusses this data source in detail. At the domestic level, we coerce the data for a given focal country at a given time period into an $A = M \times L$ array, where M_{ℓ} is a 14 × 14 matrix of domestic actors with edges $m_{ij\ell}$ reflecting relations of type ℓ . These 14 actors correspond to the taxonomy of actors illustrated in Figure 1. We include only material events, such that layers $\ell \in L$ correspond to material cooperation and material conflict (quad codes 2 and 4). Material interactions more accurately reflect the tenor of political relations than do verbal events and are less likely to involve "cheap talk." Our results are robust to verbal events (see appendix). For a given g country in a given t week, A_{gt} is a 14 × 2 array,



where the row actors are initiators of events and the column actors are targets. In the cooperative layer ($\ell = 1$), the $a_{ij1} \neq a_{ji1}$ matrix entries are counts of material cooperative events directed by *i* toward *j* in that week, expressed as *positive* integers. In the conflictual layer ($\ell = 2$), the $a_{ij2} \neq a_{ji2}$ entries are counts of conflictual events, expressed as *negative* integers.

Each government is also a node in an intergovernmental network of states,

$$B_{t} = \begin{bmatrix} b_{1,1,2} & \cdots & b_{1,N,2} \\ \vdots & \ddots & \vdots \\ & & & & \\ b_{N,1,2} & \cdots & b_{N,N,2} \end{bmatrix} \begin{bmatrix} b_{1,1,2} & \cdots & b_{1,N,2} \\ \vdots \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ &$$

where *N* is the number of independent countries in the system at *t*. As with *A*, we focus on material events. The $b_{ij1} \neq b_{ji1}$ entries are positive counts of $i \rightarrow j$ cooperation. The $b_{ij2} \neq b_{ji2}$ entries are negative counts of $i \rightarrow j$ conflict.

Measuring Shifts in Foreign Relations

To measure shifts, we must identify deviations from a country's "typical" pattern of intergovernmental ties. We develop an algorithm that uses distance metrics to detect inequivalence between the ties of country i in week t and i's ties in prior weeks, as specified in the B matrices. The following steps illustrate shift detection specifically in outgoing cooperative ties:

- 1. For a given week $t \ge 52$, define \mathbf{v}_t as the vector of outgoing cooperative ties of country *i*. That is, $\mathbf{v}_t = (b_{i,1,1}, b_{i,2,1}, \dots, b_{i,N,1})$ at week *t*.
- 2. Select the corresponding $b_{i+,1}$ row vector from the prior week, t s, where s = 1 in the first iteration. Denote this vector \mathbf{w}_s .
- 3. Calculate a distance score, $d(\mathbf{v}_t, \mathbf{w}_s)$. We use Canberra distance, which is computationally simple and insensitive to scale, defined as $d_{\text{Can}}(\mathbf{v}_t, \mathbf{w}_s) = \sum_{i=1}^{N} \frac{|v_j w_j|}{|v_j| + |w_j|}$.
- 4. Repeat steps 2–3 for all remaining $s \in \{1, ..., 51\}$ and collect the $d(\mathbf{v}_t, \mathbf{w}_s)$ distance scores.

The output is a *distribution of distance scores*, denoted Z(i, t), which indicates how significantly *i*'s ties in week *t* differ from its ties over the prior 51 weeks. When these scores cluster toward zero, there is little deviation from the norm. Distributions that skew toward the right suggest a shift.

Figure 4 illustrates Z(i, t) distributions with reference to three notable events: the Brexit vote on 23 June, 2016; the ISIS-perpetrated terror attacks in Paris on 13 November, 2015; and the gradual seizure of Crimea by Russia in February and March of 2014. The plots utilize data on all ties—incoming, outgoing, cooperative, and conflictual. Consider the UK example. The distributions show a substantial disruption in foreign relations in the week following the Brexit vote (i.e., week of June 26th). ICEWS data reveal that this shift was driven by both projection and reaction. In an effort to manage uncertainty by securing external support, the British government pursued visits with, and hosted visits by, officials from the US, Germany, and France. Reactions from foreign



Figure 4: Observed Shifts in Foreign Relations

Note: Distributions generated by calculating distance between current week and prior 51 weeks on combined cooperative, conflictual, outgoing, and incoming ties.

governments included preventive threats and denunciations from European Union member states, as well as more opportunistic moves, such as Russian calls for leadership change in Britain's Labor party. The appendix discusses similar dynamics in the France and Ukraine examples.

This operationalization of shifts has numerous benefits. First, shifts are endogenous to observed relations, not imposed by exogenous criteria. Second, the algorithm can identify shifts in any combination of incoming, outgoing, cooperative, and conflictual ties, and over any length of time. Third, the algorithm provides a unique baseline for each country, which updates as that country's behavior evolves over time. Finally, the algorithm is agnostic about whether a country's baseline behavior is generally more cooperative or more conflictual.

To derive a binary indicator of shifts, we impose a simple criterion. When the *minimum* value of Z(i, t) exceeds zero, a shift has occurred. Substantively, this means that a shift exists when country *i*'s foreign relations in week *t* differ significantly from *all 51 prior weeks*. Thus,

$$y_{i,t} = \begin{cases} 1 & \text{if } \min(Z(i,t)) > 0 \\ 0 & \text{otherwise.} \end{cases}$$
(1)

This criterion converts the Z(i, t) distribution to a usable $y_{i,t}$ datum. It also ensures that our definition of a shift is robust to distance metrics. For any $d(\mathbf{v}_t, \mathbf{w}_s)$ metric, Eq. 1 produces the same y values. We generate multiple versions of y based on various combinations of cooperative, conflictual, outgoing, and incoming ties. Shifts occur in 2–7% of observations. Our results are robust to increasing the min(Z(i, t)) threshold in Eq. 1, expanding the 51-week window, and operationalizing y as a continuous rather than binary variable (see appendix).

Measuring Structural Imbalance

We measure structural imbalance in domestic networks using the algorithm developed by Burghardt and Maoz (2020). For each *gt* country-week, we separate the A_{gt} multiplex into two adjacency matrices. X_+ contains cooperative events in $A(\ell = 1)$, and X_- contains conflictual events ($\ell = 2$). For a given *ij* dyad, imbalance can be calculated using a count of semi-cycles. A semi-cycle of length *m* is an undirected version of a directed cycle of the same length. We define a positive semi-cycle of length 3 between nodes *i* and *j* across both layers of the multiplex $\mathbf{X} = [\mathbf{X}_+, \mathbf{X}_-]$ as $c_{ij+} = x_{ij}x_{jk}x_{ki} = 1$. A negative semi-cycle of length 3 is given by $c_{ij-} = x_{ij}x_{jk}x_{ki} = -1$. Imbalanced cycles can emerge within layers $(a_{ij1}a_{jk1}a_{ki1} = -1)$ or across layers $(a_{ij1}a_{jk2}a_{ki1} = -1)$. Dyadic imbalance is then calculated as the ratio of the number of negative semi-cycles of length 3 associated with the dyad to the total number of semi-cycles associated with the dyad, as follows:

$$\iota_{ij} = \frac{\sum_{k \neq i,j} |c_{ij-}|}{\sum_{k \neq i,j} c_{ij+} + \sum_{k,j \neq i,j} |c_{ij-}|}.$$
(2)

Imbalance for a specific node is the sum of dyadic imbalance scores involving that node:

$$\iota_{i} = \frac{\sum_{j} |c_{ij-}|}{\sum_{j} c_{ij+} + \sum_{j} |c_{ij-}|}.$$
(3)

Network-level structural imbalance is calculated as the average dyadic imbalance score in the network (Burghardt and Maoz 2020: 4):

$$\mathfrak{I} = \frac{2\sum_{i < j} \iota_{ij}}{n(n-1)}.$$
(4)

Because imbalance scores are sensitive to sparse networks—e.g., a network of only three ties will be maximally imbalanced if those ties are embedded in an imbalanced triad—we normalize Eq. 4 by network density. We also take the cube root, which reduces bias toward highly active outliers. The final metric is

$$\mathfrak{I}' = \left(\mathfrak{I}\left(\frac{\sum_{\ell}\sum_{j}\sum_{i}a_{ij\ell}}{2d}\right)\right)^{1/3},\tag{5}$$

where d is a constant equal to the maximum possible number of ties in the domestic network. The appendix shows that our results are robust to many alternative operationalizations of imbalance.

Figure 5 illustrates domestic imbalance in four cases. Consider the Paris terror attacks, which involved a dramatic spike in imbalance. ICEWS data reveal that this imbalance was driven by unrest among societal actors (CVL, MED) and by high-level policy debates between the Hollande



Figure 5: Observed Network Imbalance in Four Cases

government (GOV), party apparatuses (PTY), political opposition (OPP), and the judiciary (JUD) (Lequesne 2016). Our theory presumes that this imbalance generated uncertainty about domestic actors' preferences and overall support for the governing coalition, which in turn incentivized decisive external actions, such as Syrian airstrikes. See the appendix for further discussion.

Control Variables

The empirical analysis must separate the effect of imbalance from the effects of other domestic influences, especially traditional forms of violence and political instability. We include the following control variables, all of which are specified at the country-week level:

- *Atrocity campaigns* and *Atrocity incidents*: The log-transformed number of ongoing atrocity campaigns and atrocity incidents, respectively, where "atrocity" refers to "the deliberate killing of non-combatant civilians" in the context of political conflict (Schrodt and Ulfelder 2016)¹
- Civil war and Interstate war: Binary indicators of involvement in a civil or interstate war
- ¹ For all count variables that contain zero, we add 1 before taking the log.

(Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand 2002)

- *Coup*: Binary indicator of whether *i* experienced a coup attempt (Powell and Thyne 2011)
- Terror attacks: Log-transformed count of fatal transnational terror attacks (START 2016)
- *Violent events*: Log-transformed count of violent political events, as determined by Sundberg and Melander (2013)

We include an additional variable, *Coop-conf events*, defined as the difference between total cooperative and total conflictual domestic events in the current country-week (Boschee et al. 2019). This control ensures that the estimated effect of imbalance is not due to a relative increase in either cooperative or conflictual events. We anticipate a negative estimate. That is, a relative increase in cooperative events should solidify domestic coalitions and lower the probability of external shifts. The appendix explores other operationalizations of this variable.

Finally, we include standard country-year controls. *Autocracy* equals one for regimes that fall below -6 on the 21-point Polity scale, zero otherwise. *Anocracy* equals one for regimes that fall between -7 and +7 on the Polity scale, zero otherwise (Marshall and Jaggers 2002). *GDP* is log-transformed annual per-capita gross domestic product (Feenstra, Inklaar and Timmer 2015).

The resulting dataset is times-series and cross-sectional (TSCS). Because the spatial and temporal domain are limited by missing data in the country-year controls, the usable dataset covers 151 countries over 940 weeks from 2000 through 2017. In the appendix, we drop the country-year controls and increase the sample to 188 countries over 1,017 weeks.

Model Specification

The statistical model must capture the responsiveness of external relations to domestic imbalance while avoiding confounding from omitted variables, common causes, and temporal trends. Because we focus on immediate effects rather than fundamental reorientations in foreign policy, models that impose a structural break in the data generating process, such as change point detection (Spirling 2007), are inappropriate. Inherent features of the data—such as multiple time periods, nonbinary "treatments," and treatments administered repeatedly at different times—make traditional difference-in-differences infeasible. A twoway fixed-effects (FE) model approximates difference-

in-differences in the TSCS context (Angrist and Pischke 2009). We thus estimate the following country-week model,

$$pr(y_{i,t+1} = 1) = \gamma \mathfrak{I}'_{i,t} + \mathbf{x}_{i,t}\beta + \alpha_i + \zeta_t + \epsilon_{i,t}, \tag{6}$$

where $y_{i,t+1}$ is a binary country-week indicator of external shifts; $\mathfrak{I}'_{i,t}$ is *i*'s structural imbalance at time *t* and γ is the parameter estimate; **x** and β are control variables and parameter estimates, respectively; α_i and ζ_t are country and year fixed effects, respectively; and ϵ is an error term. Taking the lead of the dependent variable reduces the risk of simultaneity bias. α_i accounts for unobserved unit heterogeneity, and ζ_t accounts for system-level trends.

We estimate Eq. 6 using the logit estimator developed by Stammann, Heiss and McFadden (2016),² which addresses the well-known incidental paramater bias of FE logit models via an analytical correction proposed by Hahn and Newey (2004). This estimator also employs a pseudo-demeaning algorithm that, unlike conditional logit, provides estimates of the fixed effects themselves, which enables calculation of marginal effects and associated standard errors.

We considered many alternative models. We specified twoway FEs at the country-week level. We estimated a weighted FE model, which may be more robust to violations of the assumptions of FE models (Imai and Kim 2019). And we estimated spatial lag models. Our findings are robust to all of these specifications (see appendix). Finally, in order to untangle the imbalance-shift causal relationship, we estimated panel vector autoregression (PVAR) models, discussed further below.

Empirical Analysis

We estimate three baskets of models, focusing separately on shifts in combined ties (i.e., a focal state's outgoing and incoming ties considered together), only outgoing ties, and only incoming ties. Figure 6 illustrates the estimates. Each column corresponds to a separate model. To facilitate comparison of estimates, all variables were centered and scaled prior to estimation.

The far left column is the most general in that it considers all possible bilateral ties—cooperative and conflictual, outgoing and incoming. The estimates show a large, precise effect for *Network*

² We use the bife package in R.



Figure 6: Standardized Estimates from Bias-Corrected Fixed-Effects Logit Regression

Note: All variables mean-centered and standardized. Circle size indicates coefficient magnitude. Black squares indicate estimates significant at p < .01. Year estimates not shown. Full table in appendix.



Figure 7: Marginal Effect of Imbalance

Note: Continuous variables held at means. Binary variables held at medians. Shaded polygons are 95% confidence intervals. ζ_t set at 2017. α_i set at sample mean.

imbalance. When countries experience imbalance in their domestic political networks, they are more likely to see subsequent disruptions in foreign relations. *Atrocity campaigns* has a slightly stronger effect on shifts than does network imbalance. Only *Violent events* and *GDP*, as well as the *Coop-conf events* technical control, show no statistically discernible effect. The remaining columns of Figure 6 separate out different types of shifts. Across these models, *Network imbalance* consistently influences foreign relations of all types. While *Civil war* and *Atrocity campaigns* are also statistically significant in most models, we show below that these variables have little predictive power.

Figure 7 illustrates the marginal effect of increasing *Network imbalance* from its minimum to its maximum value, based on estimates from the first three columns of Figure 6. For countries at low levels of imbalance, the probability of a shift is no greater than 5%. As imbalance increases, that probability increases to nearly 25%. This impact differs across outgoing and incoming ties. Even at maximum imbalance, the probability of a shift in outgoing ties is only about 8%, while the probability of a shift in incoming ties is nearly double that at 14%. These divergent results suggest

that reaction mechanisms may be more powerful than projection.

Imbalance within Subgroups

The above analysis assumes that all forms of imbalance matter for foreign relations, regardless of actors involved. Yet, imbalances among some actors may be more relevant than imbalances among others. The top-left panel in Figure 8 summarizes instances of imbalance for each type of subnational actor, based on Eq. 3, where an "instance" is simply an actor-country-week where imbalance is greater than zero. All actors are involved in imbalanced ties at some point, but some actors are clearly more prone to imbalance than others.

To determine how this variation matters for foreign relations, we calculate imbalance on subgroups of actors. We broadly distinguish between (1) administrative actors with formal ties to the government, (2) societal actors that have no formal ties to the government and may or may not support it, and (3) actors that overtly oppose the government. First, we derive imbalance only for administrative actors (GOV, COP, JUD, MIL, SPY), which should be especially applicable to regimes where leader survival depends on administrative insiders and political elites, such as smallselectorate systems. Second, we calculate imbalance only for non-administrative societal actors (CVL, MED, BUS, EDU, IGO, PTY, OTH). This metric is particularly relevant to regimes where leader survival depends on mass public support and general stability among dominant societal actors. Finally, we calculate imbalance on "mixed" dyads, where one actor is from the administrative or societal subgroup, or is an opposition actor (OPP, REB), and the other actor comes from a different subgroup. This metric is especially applicable to regimes where leaders depend on broad coalitions across all three subgroups.

The chord diagram in Figure 8 illustrates instances of imbalance by subgroup. While imbalances are most numerous when considering all actors simultaneously, we find thousands of instances of subgroup imbalance. The numerous edges between arcs further indicate that imbalance often afflicts multiple subgroups in the same country-week. We re-estimated Equation 6 using the three subgroup imbalance metrics in place of our main imbalance metric. The bottom panels of Figure 8 show point estimates and marginal effects. Imbalance affects external relations even when it is



Figure 8: Frequency and Effect of Subgroup Imbalance

Top left: Instances of country-week imbalance by actor, defined as a country-week where imbalance is greater than zero. *Top right:* Points on arcs are instances of country-week imbalance within labeled subgroups. Arc length corresponds to number of observed instances. Edges indicate instances of imbalance in multiple subgroups in same country-week. "All actors": imbalance calculated for all dyads. "Administrative": dyads containing {GOV, COP, JUD, MIL, SPY}. "Only societal": dyads containing {CVL, MED, BUS, EDU, IGO, PTY, OTH}. "Mixed actors": one node from {GOV, COP, JUD, MIL, SPY}, or {CVL, MED, BUS, EDU, IGO, PTY, OTH}, or {OPP, REB}, other node from different subgroup. *Bottom:* Marginal effect of subgroup imbalance. Shaded polygons are 95% confidence intervals. ζ_t set at 2017. α_i set at sample mean. Control variables held at means/medians. Insets show point estimates and 99% confidence intervals. Estimates for controls not shown.



Figure 9: Panel Vector Autoregression Estimates of Imbalance and Shifts

Note: Symbols are point estimates. Lines are 99% confidence intervals. See appendix for full results.

restricted to narrowly defined subgroups. Imbalances between mixed actors, which cut across all major domestic subgroups, have a particularly strong effect.

Imbalance over Time

Equation 6 models imbalance as a one-period lag, but the effects of imbalance may linger longer than a week. Reverse causality is also a concern. We thus estimate linear panel vector autoregression models (PVAR) (Sigmund and Ferstl 2021). Figure 9 shows estimates for imbalance and shifts using four-period lags. While the one-period lag of imbalance has the strongest impact, the model reveals a statistically significant effect even a full month out. The reverse effect of shifts on imbalance is insignificant. The appendix extends the PVAR model to all nine dependent variables with eight-week lags. We find that imbalance always has a positive one-week effect on all varieties of external shifts. This effect is more erratic for longer lags but is generally positive and decays over time before dissipating around the eighth week. We find no evidence of reverse causality.

Out-of-Sample Prediction

We next turn to out-of-sample prediction (Ward 2016), comparing the predictive value of network imbalance to the predictive value of common instability metrics. We estimate separate models for



Figure 10: Bivariate Out-of-Sample Predictions of External Political Shifts

each variable using a "moving window" approach, which entails (1) specifying a 51-week period as a training set and estimating a bivariate model; (2) using those parameter estimates to predict shifts in the subsequent, out-of-sample week or validation set; and (3) moving the window forward one period and successively repeating the procedure. Applying this method one variable at a time for all country-weeks effectively isolates each variable's unilateral predictive power.

Figure 10 illustrates the results. As shown by the receiver operating characteristic (ROC) curves, most of the variables yield predictions that scarcely differ from a coin flip. *Atrocity campaigns*, despite its significance in the logit model, has virtually no predictive power. *Network imbalance*, by contrast, single-handedly yields an area under the curve (AUC) of 0.65—and also yields the highest AUC in the precision-recall (PR) curves. While the predictive power of imbalance is, in absolute terms, quite low, it is nonetheless greater than for any other variable. Random forest models, summarized in the appendix, provide further evidence that *Network imbalance* is by far the most important variable in correctly predicting shifts out of sample.



Figure 11: Iran Green Movement Protests, June–December 2009

Top: Out-of-sample predictions with Iran as validation set and all other observations as training set. In "observed" scenario, predictions based on observed values of all variables. In "counterfactual" scenario, *Network imbalance* held at zero. Shaded areas indicate shifts. *Bottom:* Weekly imbalance among disaggregated subgroups.

Imbalance and Shifts in Iran's Green Movement

Finally, we combine out-of-sample prediction with counterfactual analysis to unpack the dynamics of a specific case: Iran's 2009 Green Movement protests. We first derive predictions using observed values of all variables. We then derive a second set of counterfactual predictions where all covariates are kept at their observed values but *Network imbalance* is set to zero. The difference between these sets of predictions indicates the increased probability of a shift associated with imbalance.

Figure 11 illustrates the results. The controversial Iranian presidential election on 12 June, 2009, triggered anti-regime protests that endured for months and included not only civilians but also opposition parties, judicial bodies, security forces, and higher education. As the bottom panel of Figure 11 illustrates, structural imbalance pervaded all subgroups. Throughout this period, Iran undertook multiple shifts in its foreign relations, including a dramatic expulsion of British diplomats that, according to the British Foreign Office, was a "distraction policy" intended to "blame Britain for the current unrest."³ Domestic imbalance appears to have played a central

³ "Brown Expels Two Iranian Diplomats," *The Herald*, 24 June, 2009.

role in Iran's interactions with other governments. The counterfactual scenario reveals that, with imbalance held at zero, the predicted probability of a shift remains low for most of this period, resulting in numerous false negatives. At observed levels of imbalance, the model correctly predicts virtually all shifts. The appendix offers in-depth analysis of this case and presents similar results for the Syrian civil war, Ukrainian revolution, Brexit, Paris terror attacks, and Turkish coup.

Conclusion

IR scholars have long speculated about linkages between domestic and international politics, but the discipline generally lacks well-developed theories and rigorous empirical analyses of how, when, and why domestic events affect foreign relations. We offer an innovative approach that treats domestic and international politics as integrated multiplex networks.

We emphasize three substantive contributions. First, in order to determine the effect of domestic events on external outcomes, scholars must consider not only events themselves but also the *structure of interactions* among politically relevant actors. We have examined structural imbalance, but other structural features of domestic networks may prove important. Second, domestic events exercise influence through multiple mechanisms. In some cases, leaders manipulate their own foreign relations—a practice we term projection. But domestic events also lead to reactions from foreign governments, and those reactions may be as meaningful as projection. Third, while commonly theorized sources of instability—terrorist attacks, political violence, coups, etc.—often affect foreign relations, the effect of structural imbalance is independent of, and often more powerful than, the effects of these other phenomena. Structural imbalance is a unique feature of political networks and worthy of analysis in its own right.

There is much room for future research. Our analysis raises questions about the lingering effects of imbalance. Particularly severe or lengthy periods of imbalance, or imbalances among certain subnational actors, may generate longer-term impacts. This work also has implications for regional or global imbalance. For example, imbalance among governments themselves may presage system-level shifts. Global imbalance may be connected to wars, pandemics, and other crises. Finally, while we emphasize a link between domestic instability and external shifts, the conditions that

promote stability and predictability in international relations also deserve attention.

Acknowledgements: We thank our colleagues on the UC Davis SPINS project (https://spins.

faculty.ucdavis.edu/contact-us/) for their help and advice.

References

Ake, Claude. 1975. "A Definition of Political Stability." Comparative Politics 7(2):271–283.

- Albrecht, Holger and Dorothy Ohl. 2016. "Exit, resistance, loyalty: Military behavior during unrest in authoritarian regimes." *Perspectives on Politics* 14(1):38–52.
- Alrababa, Ala and Lisa Blaydes. 2021. "Authoritarian media and diversionary threats: Lessons from 30 years of Syrian state discourse." *Political Science Research and Methods* 9(4):693–708.
- Angrist, Joshua D. and Jörn Steffen Pischke. 2009. *Mostly harmless econometrics: An empiricist's companion*. Princeton, NJ: Princeton University Press.
- Boix, Carles and Milan W Svolik. 2013. "The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships." *The Journal of Politics* 75(2):300–316.
- Boschee, Elizabeth, Jennifer Lautenschlager, Sean O'Brien, Steve Shellman, James Starz and Michael Ward. 2019. "ICEWS Coded Event Data." Harvard Dataverse. Available at http: //dx.doi.org/10.7910/DVN/28075.
- Bueno de Mesquita, Bruce and Alastair Smith. 2012. "Domestic explanations of international relations." *Annual Review of Political Science* 15:161–181.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M Siverson and James D Morrow. 2003. *The Logic of Political Survival*. Cambridge, MA: The MIT Press.
- Buhaug, Halvard and Kristian Skrede Gleditsch. 2008. "Contagion or Confusion? Why Conflicts Cluster in Space." *International Studies Quarterly* 52(2):215–233.
- Burghardt, Keith and Zeev Maoz. 2020. "Dyadic Imbalance in Networks." *Journal of Complex Networks* 8(1):1–11.
- Cartwright, Dorwin and Frank Harary. 1956. "Structural balance: A generalization of Heider's Theory." *The Psychological Review* 63(5):277–292.
- Colgan, Jeff D. 2013. "Domestic revolutionary leaders and international conflict." *World Politics* 65(4):656–690.

- D'Agostino, Gregorio and Antonio Scala. 2014. *Networks of networks: the last frontier of complexity.* Switzerland: Springer International.
- Darcy, Robert E and Alvin Richman. 1988. "Presidential Travel and Public Opinion." *Presidential Studies Quarterly* 18(1):85–90.
- Davies, Graeme A.M. 2016. "Policy Selection in the Face of Political Instability: Do States Divert, Repress, or Make Concessions?" *Journal of Conflict Resolution* 60(1):118–142.
- Davis, David R. and Michael D. Ward. 1990. "They Dance Alone: Deaths and the Disappeared in Contemporary Chile." *Journal of Conflict Resolution* 34(3):449–475.
- Doreian, Patrick and Andrej Mrvar. 2015. "Structural Balance and Signed International Relations." *Journal of Social Structure* 16:1–49.
- Doreian, Patrick, Roman Kapuscinski, David Krackhardt and Janusz Szczypula. 1996. "A brief history of balance through time." *Journal of Mathematical Sociology* 21(1-2):113–131.
- Dorff, Cassy, Max Gallop and Shahryar Minhas. 2020. "Networks of violence: Predicting conflict in Nigeria." *The Journal of Politics* 82(2):476–493.
- Facchetti, Giuseppe, Giovanni Iacono and Claudio Altafini. 2011. "Computing global structural balance in large-scale signed social networks." *Proceedings of the National Academy of Sciences* 108(52):20953–20958.
- Fearon, James D. 1998. "Domestic politics, foreign policy, and theories of international relations." *Annual Review of Political Science* 1:289–313.
- Feenstra, Robert C, Robert Inklaar and Marcel P Timmer. 2015. "The Next Generation of the Penn World Table." *American Economic Review* 105(10):3150–3182.
- Garcia, Blake E. and Cameron Wimpy. 2016. "Does Information Lead to Emulation? Spatial Dependence in Anti-Government Violence." *Political Science Research and Methods* 4(1):27– 46.
- Gerner, Deborah J, Philip A Schrodt, Omür Yilmaz and Rajaa Abu-Jabr. 2002. "Conflict and mediation event observations (CAMEO): A new event data framework for the analysis of foreign policy interactions." *Annual Meeting of the International Studies Association, New Orleans*.
- Ghosn, Faten. 2011. "Domestic unrest and the initiation of negotiations." *International Negotiation* 16(1):69–85.
- Gleditsch, Kristian Skrede, Idean Salehyan and Kenneth Schultz. 2008. "Fighting at Home, Fighting Abroad." *Journal of Conflict Resolution* 52(4):479–506.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Håvard Strand. 2002. "Armed conflict 1946-2001: A new dataset." *Journal of peace research* 39(5):615–

637.

- Hafner-Burton, Emilie M and Alexander H Montgomery. 2009. Globalization and the Social Power Politics of International Economic Networks. In *Networked Politics: Agency, Power, and Governance*, ed. Miles Kahler. Ithaca, NY: Cornell University Press pp. 23–42.
- Hahn, Jinyong and Whitney Newey. 2004. "Jackknife and Analytical Bias Reduction for Nonlinear Panel Models." *Econometrica* 72(4):1295–1319.
- Harary, Frank. 1953. "On the notion of balance of a signed graph." *The Michigan Mathematical Journal* 2(2):143–146.
- Heider, Fritz. 1946. "Attitudes and Cognitive Organization." *The Journal of Psychology* 21(1):107–112.
- Heider, Fritz. 1958. The Psychology of Interpersonal Relations. New York: Wiley.
- Hermann, Charles F. 1990. "Changing Course : When Governments Choose to Redirect Foreign Policy." *International Studies Quarterly* 34(1):3–21.
- Hummon, Norman P. and Patrick Doreian. 2003. "Some dynamics of social balance processes: Bringing Heider back into balance theory." *Social Networks* 25(1):17–49.
- Hurwitz, Leon. 1973. "Contemporary Approaches to Political Stability." *Comparative Politics* 5(3):449.
- Imai, Kosuke and In Song Kim. 2019. "When Should We Use Unit Fixed Effects Regression Models for Causal Inference with Longitudinal Data?" *American Journal of Political Science* 63(2):467–490.
- Jackson, Jaime A, Belgin San-Akca and Zeev Maoz. 2020. "International support networks and the calculus of uprising." *Journal of Peace Research* 57(5):632–647.
- Kamrava, Mehran. 2012. "The Arab Spring and the Saudi-led counterrevolution." *Orbis* 56(1):96–104.
- Khatib, Lina. 2013. "Qatar's foreign policy: the limits of pragmatism." *International Affairs* 89(2):417–431.
- Kinne, Brandon J. 2013. "Network Dynamics and the Evolution of International Cooperation." *American Political Science Review* 107(4):766–785.
- Kinne, Brandon J and Jonas Bunte. 2020. "Guns or Money? Defense Cooperation and Bilateral Lending as Coevolving Networks." *British Journal of Political Science* 50(3):1067–1088.
- Krackhardt, David and Mark S. Handcock. 2007. Heider vs Simmel: Emergent features in dynamic structures. In *Statistical Network Analysis: Models, Issues, and New Directions*, ed. Edoardo

Airoldi, David M. Blei, Stephen E. Fienberg, Anna Goldenberg, Eric P. Xing and Alice X. Zheng. New York, NY: Springer pp. 14–27.

- Leeds, Brett Ashley. 1999. "Domestic political institutions, credible commitments, and international cooperation." *American Journal of Political Science* 43(4):979–1002.
- Lequesne, Christian. 2016. "French foreign and security challenges after the Paris terrorist attacks." *Contemporary Security Policy* 37(2):306–318.
- Lerner, Jürgen. 2016. "Structural balance in signed networks: Separating the probability to interact from the tendency to fight." *Social Networks* 45:66–77.
- Lipset, Seymour Martin. 1959. "Some social requisites of democracy: Economic development and political legitimacy." *The American political science review* 53(1):69–105.
- Maoz, Zeev. 1996. *Domestic Sources of Global Change*. Ann Arbor, MI: University of Michigan Press.
- Maoz, Zeev. 2010. Networks of Nations: The Evolution, Structure, and Impact of International Networks, 1816-2001. Cambridge, MA: Cambridge University Press.
- Maoz, Zeev and Errol A Henderson. 2020. *Scriptures, Shrines, Scapegoats, and World Politics: Religious Sources of Conflict and Cooperation in the Modern Era.* Ann Arbor, MI: University of Michigan Press.
- Maoz, Zeev, Lesley G Terris, Ranan D Kuperman and Ilan Talmud. 2007. "What Is the Enemy of My Enemy? {C}auses and Consequences of Imbalanced International Relations, 1816-2001." *Journal of Politics* 69(1):100–115.
- Margolis, Eli J. 2010. "Understanding political stability and instability." Civil Wars 12(3):326–345.
- Marshall, Monty G and Keith Jaggers. 2002. "Polity IV project: Political regime characteristics and transitions, 1800-2002." Available at http://www.systemicpeace.org/polity/polity4. htm.
- Mattes, Michaela, Brett Ashley Leeds and Royce Carroll. 2015. "Leadership turnover and foreign policy change: Societal interests, domestic institutions, and voting in the United Nations." *International Studies Quarterly* 59(2):280–290.
- McDonald, H Brooke and Richard Rosecrance. 1985. "Alliance and structural balance in the international system: A reinterpretation." *Journal of Conflict Resolution* 29(1):57–82.
- Metternich, Nils W, Cassy Dorff, Max Gallop, Simon Weschle and Michael D Ward. 2013. "Antigovernment networks in civil conflicts: How network structures affect conflictual behavior." *American Journal of Political Science* 57(4):892–911.

Milner, Helen V. 1997. Interests, Institutions, and Information: Domestic Politics and International

Relations. Princeton, NJ: Princeton University Press.

- Moore, Michael. 1979. "Structural balance and international relations." *European Journal of Social Psychology*.
- Moore, Will H. 1995. "Action-Reaction or Rational Expectations?" *Journal of Conflict Resolution1* 39(1):129–167.
- Moore, Will H. 1998. "Repression and Dissent: Substitution, Context, and Timing." *American Journal of Political Science* 42(3):851–873.
- Mor, Ben D. 1997. "Peace Initiatives and Public Opinion: The Domestic Context of Conflict Resolution." Journal of Peace Research1 34(2):197–215.
- Munroe, Paul T. 2007. Cognitive Balance Theory (Heider). In *The Blackwell Encyclopedia of Sociology*, ed. George Ritzer. Malden, MA: Blackwell Publishing pp. 559–562.
- Nicholls, Natsuko H., Paul K. Huth and Benjamin J. Appel. 2010. "When Is Domestic Political Unrest Related to International Conflict? Diversionary Theory and Japanese Foreign Policy, 1890-19411." *International Studies Quarterly* 54(4):915–937.
- Powell, Jonathan M. 2014. "Regime Vulnerability and the Diversionary Threat of Force." *Journal* of Conflict Resolution 58(1):169–196.
- Powell, Jonathan M and Clayton L Thyne. 2011. "Global instances of coups from 1950 to 2010: A new dataset." *Journal of Peace Research* 48(2):249–259.
- Regan, Patrick M and M Scott Meachum. 2014. "Data on interventions during periods of political instability." *Journal of Peace Research* 51(1):127–135.
- Riker, William H. 1962. The Theory of Political Coalitions. New Haven, CT: Yale University Press.
- Rothstein, Bo. 2009. "Creating political legitimacy: Electoral democracy versus quality of government." *American behavioral scientist* 53(3):311–330.
- Salehyan, Idean and Kristian Skrede Gleditsch. 2006. "Refugees and the spread of civil war." *International Organization* 60(2):335–366.
- Saunders, Elizabeth N. 2015. "War and the inner circle: Democratic elites and the politics of using force." *Security Studies* 24(3):466–501.
- Schrodt, Philip A. 2012. CAMEO: Conflict and Mediation Event Observations Event and Actor Codebook. 1.1b3 ed. Event Data Project, Pennsylvania State University.
- Schrodt, Philip A. and Jay Ulfelder. 2016. "Political Instability Task Force Atrocities Event Data Collection Codebook." Available at http://eventdata.parusanalytics.com/data.dir/ PITF_Atrocities.codebook.1.1B1.pdf. Parus Analytical Systems.

- Sigmund, Michael and Robert Ferstl. 2021. "Panel vector autoregression in R with the package panelvar." *Quarterly Review of Economics and Finance* 80(C):693–720.
- Smith, Alastair. 1998. "International crises and domestic politics." *The American Political Science Review* 92(3):623–638.
- Spirling, Arthur. 2007. "Bayesian approaches for limited dependent variable change point problems." *Political Analysis* 15(4):387–405.
- Stammann, Amrei, Florian Heiss and Daniel McFadden. 2016. "Estimation of Fixed Effects Logit Models with Large Panel Data." Beiträge zur Jahrestagung des Vereins für Socialpolitik.
- START. 2016. "Global Terrorism Database." Available at https://www.start.umd.edu/gtd.
- Sudduth, Jun Koga and Curtis Bell. 2018. "The rise predicts the fall: How the method of leader entry affects the method of leader removal in dictatorships." *International Studies Quarterly* 62(1):145–159.
- Sundberg, Ralph and Erik Melander. 2013. "Introducing the UCDP georeferenced event dataset." *Journal of Peace Research* 50(4):523–532.
- Tarar, Ahmer. 2006. "Diversionary incentives and the bargaining approach to war." *International Studies Quarterly* 50(1):169–188.
- Thompson, William R. 2016. "The 1920-1945 shift in Us foreign policy orientation: Theory, grand strategies, and system leader ascents." *Foreign Policy Analysis* 12(4):512–532.
- Tingley, Dustin and Michael Tomz. 2020. "International commitments and domestic opinion: The effect of the Paris Agreement on public support for policies to address climate change." *Environmental Politics* 29(7):1135–1156.
- Walter, Barbara. 2002. *Committing to Peace: The Successful Settlement of Civil Wars*. Princeton, NJ: Princeton University Press.
- Ward, Michael D. 2016. "Can We Predict Politics? Toward What End?" *Journal of Global Security Studies* 1(1):80–91.
- Warren, T. Camber. 2014. "Not by the sword alone: Soft power, mass media, and the production of state sovereignty." *International Organization* 68(1):111–141.
- Weeks, Jessica L. 2012. "Strongmen and straw men: Authoritarian regimes and the initiation of international conflict." American Political Science Review 106(2):326–347.
- Wolford, Scott. 2007. "The Turnover Trap: New Leaders, Reputation, and International Conflict." *American Journal of Political Science* 51(4):772–788.

Wright, John R. and Arthur S. Goldberg. 1985. "Risk and Uncertainty as Factors in the Durability

of Political Coalitions." American Political Science Review 79(3):704–718.

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