
Honor Among Thieves: Understanding Rhetorical and Material Cooperation Among Violent Nonstate Actors

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Abstract Cooperation among militant organizations contributes to capability but also presents security risks. This is particularly the case when organizations face substantial repression from the state. As a consequence, for cooperation to emerge and persist when it is most valuable, militant groups must have means of committing to cooperation even when the incentives to defect are high. We posit that shared ideology plays this role by providing community monitoring, authority structures, trust, and transnational networks. We test this theory using new, expansive, time-series data on relationships between militant organizations from 1950 to 2016, which we introduce here. We find that when groups share an ideology, and especially a religion, they are more likely to sustain material cooperation in the face of state repression. These findings contextualize and expand upon research demonstrating that connections between violent nonstate actors strongly shape their tactical and strategic behavior.

Alliances among militant organizations have long been a matter of both academic and policy concern. Nearly twenty years ago, the 2003 US National Strategy for Combating Terrorism stated that “the interconnected nature of terrorist organizations necessitates that we . . . ensure that all linkages between the strong and the weak organizations are broken, leaving each of them isolated, exposed, and vulnerable to defeat.”¹ Breaking down the relationships among militant organizations remains a priority. For example, the UN’s Analytical Support and Sanctions Monitoring Team recently noted that securing peace in Afghanistan will hinge on degrading cooperation between the Taliban and al-Qaeda (AQ).²

Despite the priority placed on disrupting militant relationships, researchers know little about why some are more durable than others. While it is well established that shared ideology facilitates the initiation of cooperation,³ we contend that it also enhances the durability of that cooperation. By generating reputational incentives and engaging external networks of co-ideologues who can help monitor and

1. Government of the United States 2003.
2. Analytical Support and Sanctions Monitoring Team 2020.
3. Bapat and Bond 2012; Horowitz and Potter 2014.

enforce cooperation, shared ideology enables and preserves deep partnership between armed groups. This is especially important in the context of state repression, which introduces powerful incentives for defection. Thus, while militant cooperation is often plagued by substantial commitment problems, we theorize that shared ideology can help organizations overcome these challenges and *sustain* cooperation even in the most difficult of circumstances.⁴

We assess this argument with original data from the Militant Group Alliances and Relationships (MGAR) data set, which we introduce in this article. These data attempt to document all known cooperative and competitive relationships for a large sample of militant groups globally from 1950 to 2016. The MGAR data describe nearly 6,000 cooperative relationships among 2,613 militant groups.⁵

These data allow us to explore two facets of the relationship between shared ideology and repression that researchers were previously unable to investigate. First, because MGAR contains extensive time-series data on cooperation, it enables a deep assessment of not only the onset of cooperation but also its duration and demise. Understanding the duration and durability of alliances speaks most immediately to the efficacy of interventions aimed at disrupting cooperation, and of counterterrorism and counterinsurgency more generally. Second, because the data characterize the form of cooperation, we can explore the distinction between material and rhetorical relationships. Material alliances contribute directly to capabilities through the transfer of weapons, resources, and fighters between groups. But not all relationships among militant organizations have a material component.⁶

Purely rhetorical relationships have played a key role in expanding the capacity of important militant organizations, but we know comparatively little about them. Both AQ and the Islamic State (ISIS) drew strength and legitimacy from networks of rhetorical supporters. Such relationships cannot be dismissed as cheap signaling because they present meaningful risks to security, reputation, and internal cohesion for the organizations involved. Boko Haram split into factions after some of the group's leaders pledged allegiance to ISIS, while others saw this as a distraction from domestic priorities.⁷ Similarly, AQ's reputation suffered as a consequence of its relationship with al-Qaeda in Iraq when that organization began to indiscriminately target civilians. Nor are rhetorical relationships inconsequential—MGAR data show that rhetorically allied dyads carried out an average of forty-four more attacks per year than nonallied dyads.

We find, consistent with existing research, that groups with a shared ideology are more likely to initiate alliances than those with divergent ideologies. We then use the longitudinal structure of our data to demonstrate that shared ideology allows organizations to better sustain material cooperation in the face of government repression.

4. Gade et al. 2019; Gade, Hafez, and Gabbay 2019.

5. MGAR builds on Asal et al. 2016; Asal and Rethemeyer 2008; Bapat and Bond 2012; Horowitz and Potter 2014; Hou, Gaibullov, and Sandler 2020.

6. Horowitz and Potter 2014.

7. Hentz and Solomon 2017.

We also find that this effect is particularly strong for shared religion and then attenuates for shared leftist and ethnonationalist ideologies. We hold that ideological alignment offers four benefits: it lengthens the shadow of the future, facilitates monitoring and enforcement, provides access to common authority structures, and enhances trust. While most shared ideologies have some of these attributes, religion offers a particularly complete package. Finally, we illustrate that these effects of shared ideology are concentrated in material alliances and are more muted in rhetorical relationships.

The rest of the paper proceeds as follows. First, we develop our theory of militant cooperation in the context of repression and contextualize it within the existing body of work in this area. We then introduce the MGAR data set and describe the new insights these data provide on the patterns of alliance behavior over time. We test our theoretical expectations, distinguishing alliance formation and durability. We conclude by outlining the academic and policy consequences of our findings, as well as questions for future research.

The Risks and Rewards of Cooperation

Armed groups exist in acutely anarchic environments.⁸ They can appeal to no authority, they are regularly defeated,⁹ and their members are frequently killed. As a result, despite their typically long-term political objectives, they tend to operate with relatively short time horizons¹⁰ and overwhelmingly prioritize their own security.¹¹ This immediacy has a profound impact on their behavior and results in competition for recruits, funding, and notoriety.¹² It also renders organizations hesitant about any action, including cooperation with other groups, that exposes them to additional risk.

The risks of cooperation stem, in part, from the potential for the infiltration of or defection by alliance partners.¹³ For instance, the alliance between the Revolutionary Armed Forces of Colombia (FARC) and Sendero Luminoso broke down in 2011 after documents seized in raids on FARC bases contributed to the capture of FARC commander Alfonso Cano and Sendero Luminoso commander Comrade Artemio.¹⁴

The risk of defection and security breaches is exacerbated by the weak mechanisms for enforcement and monitoring that persist among militant organizations. These organizations cannot create institutions in the same way as states and consequently have fewer means by which to verify compliance or punish partners for defection. While armed groups can formalize cooperation and require reporting or oversight,

8. Christia 2012.

9. Phillips 2019.

10. Christia 2012; Weinstein 2007.

11. Shapiro 2013.

12. Weinstein 2007.

13. Bacon 2017, 2018; Blair, Horowitz, and Potter, *forthcoming*; Byman 2014; Shapiro 2013.

14. "Colombia Kills Top FARC Rebel Commander in Raid," Reuters, 23 September 2010.

these steps exacerbate security risks.¹⁵ For instance, in the prior example, documentation and formalized cooperation between FARC and Sendero Luminoso contributed to the security breach that ultimately undermined the alliance.

The challenges of cooperation do not end once a relationship is initiated. Alliances are difficult to sustain in the face of pressure from the state for at least three reasons. First, constant engagement against state security forces can preoccupy militants and exhaust resources, leading alliance obligations to go unfulfilled. Consider the alliance between the Red Brigades and the Armed Proletarian Nuclei (NAP). Their alliance collapsed in 1978 after Italian police decimated NAP in 1977, raiding at least thirty-nine safe houses, seizing weapons and operatives, and ultimately killing NAP leader Antonio Lo Musico.¹⁶ As the police campaign expanded, NAP was forced to withhold operatives from planned operations with the Red Brigades, which contributed to the breakdown of the relationship.

Second, state repression can undermine alliances, particularly material alliances, by inhibiting groups' ability to interact. In general, material cooperation requires communication, contact, and transactions between group members. When state pressure increases, it limits these necessities of alliance maintenance. For example, repression exacerbated communication problems between AQ and its affiliates, prompting one AQ leader to ask: "How can we correspond with brothers in Algeria, Iraq, Yemen and Somalia? Sometimes there is no other means after taking precautions."¹⁷

Third, repression reduces trust. Consistent losses force a reappraisal of security. Allies, as outsiders to an organization, are typically the first to come under suspicion. For instance, cooperation between AQ and the Haqqani Network was strained in 2010–11 as AQ commanders feared that Haqqani operatives were passing information to Pakistan's Inter-Services Intelligence.¹⁸ No evidence has emerged that this actually occurred, but AQ's paranoia illustrates how state pressure can impede cooperation and breed dissent among allies.

Why then do armed groups cooperate at all? A substantial body of evidence suggests that they do so because, under some conditions, the benefits can outweigh the risks.¹⁹ Cross-national studies confirm that alliances can augment armed groups' capabilities, lethality, and resilience.²⁰ Taken together, these benefits motivate groups to accept the inherent risks and uncertainty of alliance commitments.

The first wave of research on alliance formation examined the role of entrepreneurial group members and their personal relationships.²¹ More recently, some

15. Bacon 2017; Shapiro 2013.

16. Gnosis: Rivista Italiana di Intelligence 2006; *Terrorism and Security: The Italian Experience* 1984, 20.

17. Office of the Director of National Intelligence 2011.

18. Mir 2018, 70, 76.

19. Bacon 2018; Byman 2014; Moghadam 2017; Sandler 2005.

20. Asal and Rethemeyer 2008; Bacon 2018; Horowitz and Potter 2014; Phillips 2014; Price 2018.

21. Eilstrup-Sangiovanni and Jones 2008; Hoffman and McCormick 2004; Pedahzur and Perliger 2006.

researchers have shifted their attention from individuals to organizations.²² Much of this work emphasizes commonalities between potential partners—in terms of ideology, tactical capabilities, ethnicity, alliance portfolios, or foreign sponsors—that serve as a foundation on which cooperation can build.²³ These shared features demonstrate trustworthiness, credibility, and dedication; they can also improve monitoring. With security fears looming large, this can facilitate credible commitments.²⁴

Understanding cooperation between militant groups thus requires explaining how groups commit themselves in the face of repression. One established answer is that shared state sponsors can prevent militant groups from unilaterally defecting, particularly when groups are weak or repressed.²⁵ However, many groups—even weak groups—that lack a shared sponsor still form durable alliances. Indeed, we find that groups share a sponsor in just 4.2 percent of the 5,918 alliance-years in our data. This rarity of shared sponsorship suggests that militant groups must devise additional ways to solve commitment problems.

In response, we focus on the role of shared ideology as a vehicle for developing and maintaining the trust and commitment required for alliance formation and durability.²⁶

Ideological Commonality and the Dynamics of Cooperation

Following most recent work in this area,²⁷ we use Sanín and Wood’s definition of ideology as a “more or less systematic set of ideas that includes the identification of a referent group (a class, ethnic, or other social group), an enunciation of the grievances or challenges that the group confronts, the identification of objectives on behalf of that group (political change—or defense against its threat), and a (perhaps vaguely defined) program of action.”²⁸

Work in this area indicates that, for many organizations, ideologies can be overlapping and imprecise but are relatively static. Change in ideology is relatively rare, in part because it generally occurs over long time frames. For example, the ideology that governed Basque Fatherland and Freedom had both leftist and nationalist-separatist elements. While leftism was more central to the group’s ideology in the late 1960s and early 1970s as the group was debating how to inspire a *lucha de masas* (mass

22. Zech and Gabbay 2016.

23. Bacon 2018; Christia 2012; Gade et al. 2019; Gaibullov 2015; Moghadam 2017; Popovic 2018.

24. Alliances can also arise from mundane issues of convenience. Gaibullov 2015; Phillips 2014.

25. Bapat and Bond 2012; Popovic 2018. Bapat and Bond show that weak and repressed groups have a more difficult time credibly establishing a shadow of the future, and can rely on a shared state sponsor to enforce cooperation. Carter 2012 cautions that sponsorship can also be risky since sponsors can pass information to state adversaries.

26. Our argument extends existing work finding that shared social ties (e.g., ideology) form a stronger basis for collective action than overlapping interests. Christia 2012; Gade et al. 2019.

27. E.g., Keels and Wiegand 2020.

28. Sanín and Wood 2014, 214.

proletariat struggle) to achieve Basque independence, leftist economic thought was integral to the group's platform in later years as well.²⁹ Moreover, consistent with nearly all existing and cutting-edge work in this area,³⁰ our coding of ideology is time-invariant.³¹

Research indicates that while group ideology is sticky and deeply linked to organizational identity, it is not immutable. For example, during their conflict with the Russian state, Chechen militants shifted from a primarily nationalist orientation to one more inflected with Salafism.³² This was, in part, strategic since it facilitated relationships with some of the most capable terrorist organizations in the world, but it was only possible because most Chechens were Muslims. Similarly, the handful of Palestinian organizations that have survived for long periods have, while consistently hewing to nationalist objectives, generally transitioned from a leftist ideological perspective to a more religiously oriented one. Again, this had substantial strategic value as the Cold War drew to a close and Islamist organizations came to the fore, but it also reflected the changing orientation of their constituency.

We hold that ideological commonality offers four benefits that make cooperation more likely and durable: it lengthens the shadow of the future, facilitates monitoring and enforcement, provides access to common authority structures, and enhances trust.

First, as noted by scholars such as Bapat and Bond, shared ideology lengthens the “shadow of the future” because groups in the same ideological circles are more likely to share other allies, communicate with common peers, and interact repeatedly over time.³³ Jemaah Islamiya, for instance, worked with AQ to expand its operational reach beyond Indonesia to Singapore, Thailand, Malaysia, and the Philippines. Yet, Jemaah Islamiya and AQ did not cooperate in isolation; they were embedded within a broader jihadist network that included Abu Sayyaf, the Moro Islamic Liberation Front, Jamaah Anshurat Tauhid, and others.³⁴ Similar webs also existed among European and Latin American far-left groups.³⁵ These ideological networks are important because they raise the stakes of alliance commitment. News of defection or abrogation can quickly disseminate throughout the ideological network and undermine a group's reputation, undermining its chances of forging other alliances in the future.

Second, shared ideology can facilitate monitoring and enforcement by granting access to a wider community of nonmilitant co-ideologues. Whether diasporas,³⁶ religious adherents, or simply foreign supporters, armed groups can leverage external supporters—who are typically under less immediate pressure from the state—to detect and sanction violations of alliance obligations. This works particularly well

29. Elorza et al. 2006, 256.

30. Parkinson 2021.

31. See also Asal and Rethemeyer 2008; Hou, Gaibullov, and Sandler 2020.

32. Bakke 2014.

33. Bapat and Bond 2012.

34. Hastings 2010.

35. Karmon 2005; Phillips 2014.

36. Byman 2013, 988–89.

when nonmilitant co-ideologues are hard-liners who view the militant struggle as a mission to resist infringements on their core ideological values.³⁷ For example, throughout the 1980s and 1990s, as the Kurdistan Workers' Party (PKK) suffered setbacks amid a Turkish military crackdown, Kurdish populations in Germany, Belgium, and France engaged in advocacy and fundraising to sustain the PKK's relationship with its European affiliates.³⁸ More recently, AQ leveraged the charity organizations of nonmilitant co-ideologues to transfer money to its affiliates when more direct methods became unavailable.

Third, shared ideology provides access to common authority and social structures that reduce uncertainty and promote cohesion.³⁹ For instance, in Syria, fraught alliances between Ahrar al-Sham, Suqur al-Sham, Jabhat al-Nusra, and Jaish al-Islam were reinforced after Yusuf al-Qaradawi (considered "the world's most influential Sunni cleric") publicly hailed Ahrar al-Sham efforts as "a legitimate jihad."⁴⁰ Although each of these groups received support from state sponsors, they did not share the same sponsor. Rather, Saudi Arabia, Qatar, and Turkey supported different factions, and largely sought to disrupt alliances between their sponsorees and groups supported by other states. Salafi clerics urged cohesion in spite of competition between state sponsors. This role for ideological authority figures is not unique to Salafist groups. Appeals to leading Leninist and Çayanist thinkers were important in sustaining the alliance between the Turkish People's Liberation Front (THKP-C), the Mahir Çayan Suicide Group, and the Revolutionary Youth Federation in Turkey.⁴¹ Ideological authorities can also incentivize cooperation by heralding partnership with groups deemed ideologically pure and sanctioning groups deemed illegitimate. These labels carry reputational costs that subsequently affect groups' ability to attract recruits, financing, and political support.⁴²

Fourth, when two groups are ideologically aligned, their common ideals and values enhance mutual trust.⁴³ Ideological congruence makes it easier for groups to have confidence in the motivations of potential and existing partners. This, combined with the other benefits described earlier, suggests that groups sharing ideologies have unique advantages that facilitate alliance commitment. This leads to our first expectation:

H1: Organizations with shared ideology are more likely to initiate cooperation than are organizations that do not share an ideology.

Once cooperation takes hold between militant organizations, it is frequently targeted and challenged by states. Shared ideology facilitates sustained cooperation in

37. Piazza 2018, 616–17.

38. Marcus 2007, 65–66, 233–34.

39. Parkinson 2021.

40. Baylouny and Mullins 2018, 997–99.

41. Yilmaz 2014.

42. Byman 2013; Walter 2017.

43. Atran, Axelrod and Davis 2007; Maynard 2019; Walter 2017.

the face of state repression through these same four mechanisms, and it is in this context that its effect should be most clearly visible. Indeed, as ideologically aligned organizations perceive a greater threat, their monitoring, enforcement, and commitment may even strengthen in response because research shows that in-group resolve increases in response to out-group pressure.⁴⁴ In cases of cross-ideological collaboration, by contrast, cooperation under repression becomes increasingly difficult to sustain. Thus, we expect that:

H2: When faced with repression, organizations with shared ideology are more likely to sustain cooperation than are organizations that do not share an ideology.

The Critical Role of Religion

Not all ideologies are equivalent. We have argued that shared ideology offers relationship benefits because it lengthens the shadow of the future, facilitates monitoring and enforcement, provides access to common authority structures, and enhances trust. While most shared ideologies have some combination of these attributes, shared religion is particularly robust on these dimensions when compared to alternatives such as leftism or nationalism.⁴⁵

Networks of religiously motivated organizations are some of the most established and wide reaching. This makes the shadow of the future even more consequential by exacerbating the negative consequences of alliance defection. These well-developed religious networks also make it more likely that groups can obtain useful information on alliance partners even before collaborating.

Shared religion also facilitates commitment because external religious constituencies consist of large, devoted audiences and developed, robust authority structures. This means that religiously oriented militant organizations have more nonmilitant co-ideologues than other groups, and hence have more potential sympathizers who can reward cooperation, detect shirking, and punish defection. Perhaps most significantly, religions can provide access to nonmilitant authority structures that are resistant to state repression.⁴⁶ As Walter argues, the role of religious authorities is central to commitment because these figures hold cheap means of rewarding cooperation and punishing defection.⁴⁷

For example, some religious figures leveraged promises of holy reward and punishment to help smooth over alliance tensions between AQ and al-Qaeda in Iraq, as well as various Salafist factions in the Syrian civil war. Even in Northern Ireland,

44. Asal, Brown, and Dalton 2012; McLaughlin and Pearlman 2012; Perkoski 2019.

45. See also Webber et al. 2020.

46. This is not to say that the core of a religion is supportive of violence, but rather that institutions and authority figures around the periphery of religion can willingly or unwillingly be repurposed in support of violent extremism.

47. Walter 2017, 9.

preachers like Ian Paisley helped cement cooperation between loyalist groups like the Ulster Volunteer Force and the Ulster Defence Association.⁴⁸ Strengthening this effect, states tend to hesitate to crack down on religious leaders and organizations, even those with apparent ties to militancy, for fear of alienating the broader public and escalating a conflict.⁴⁹

Of course, while religion—and specifically extremist variants of Salafism—is the dominant shared ideology among militant groups today, this was not always the case. Leftist organizations were ubiquitous throughout the 1970s and 1980s, drawing on a large, devoted, international mass of adherents at the ideology’s peak during the Cold War. Consequently, their networks may have similarly benefited from some of the mechanisms described here. For instance, communist parties and activists around the world helped coordinate transnational revolutionary efforts. Likewise, leftism, more so than other nonreligious ideologies like ethnonationalism or right-wing extremism,⁵⁰ featured clear authority structures. Theorists and revolutionaries such as Marx, Lenin, Trotsky, Mao, Castro, and Guevara formed focal points through which militant groups could claim ideological credibility.⁵¹ These individuals facilitated commitment because they could decry defection as deviation from the proper, revolutionary path. For example, Turkish communist intellectual Mahir Cayan, founder of the THKP-C, successfully leveraged his Marxist credentials to denounce Dev-Genc, another Turkish communist group, for “right-deviationism” after Dev-Genc strayed from THKP-C and endorsed a Kemalist faction of the Workers’ Party of Turkey.⁵² Subsequently, THKP-C attracted new support from the People’s Liberation Army of Turkey for its ideological stance.

Taken together, we anticipate that religious ideology is most closely associated with the formation of militant cooperation and durability in the face of repression. But this derives from religions’ institutions, followers, and dense contemporary networks, rather than theology or the nature of religious belief or practice.⁵³ We anticipate that our hypothesized relationships will be most pronounced for organizations that share a religious ideology, and that similar but attenuated effects will exist for secular ideologies with substantial numbers of adherents and international institutionalization (as with leftism in the Cold War era).

48. Bruce 2007, 223–24.

49. Basedau, Pfeiffer, and Vüllers 2016; Freedman 2019.

50. Although secular far-right organizations were active during this time, such groups operated largely autonomously within particular countries and did not have the same global, networked, and hierarchical structure as far-left groups.

51. Clashes over ideological differences stemming from debates between followers of these thinkers have also led to factionalism within leftist groups. Cronin 2009, 97.

52. Yilmaz 2014, 30–31.

53. This also puts aside the extent to which religious ideologies evince particular devotion and willingness to sacrifice among adherents. Atran, Axelrod, and Davis 2007 discuss the role of “sacred values” in this context, but this mechanism lies outside our theory.

Rhetorical and Material Cooperation

Rhetorical and material relationships differ in their purpose, costs, and requirements. With few exceptions, rhetorical alliances are of value only if they are public. Because these alliances are about expressed support for another group and exclude material exchange, they are largely driven by a belief by one group in the merits of another group's cause. Moreover, rhetorical alliances are "cheaper" than material alliances that entail the expenditure of resources (e.g., guns, bombs, transportation, training) and effort (e.g., smuggling weapons, crossing borders).

Nonetheless, rhetorical alliances may pose substantial reputational risks. Because they are public, rhetorical declarations of support affect judgments about the ideological commitment and general credibility of both groups. Indeed, with their association clearly visible, groups may also be more concerned about the conduct of their public rhetorical allies as compared to private material allies. Groups risk backlash if their rhetorical allies suffer devastating setbacks or commit atrocities that sap public support. In both cases, rhetorical partnership with a malfeasant or weak ally can give the impression that a group is itself weak or mismanaged.

In contrast, material alliances usually operate best when they are clandestine. They are usually developed for the exchange of specific resources like arms, territory, training, operational plans, and funding to remedy operational deficits. The physical nature of this exchange makes these relationships more vulnerable to infiltration and defection, and the need for monitoring generates further security vulnerabilities. States also have a greater incentive to disrupt material relationships because of their immediate link to the capacity for violence. Finally, the higher physical costs and risks of material cooperation generate greater concerns over reciprocity.

Differences in their purposes, costs, and mechanics mean that rhetorical and material alliances are likely to respond differently to repression. As repression shortens time horizons, exacerbates resource deficits, and raises the likelihood of outright collapse, material alliances become more instrumentally valuable. Yet, concerns about security and reciprocity may be especially daunting when a group is facing a period of intense repression.

Thus, while repression increases the need for material support, it also makes it much harder to establish and maintain. In this context, organizations need mechanisms to overcome the concerns over security, reciprocity, and partner defection that gain salience in material cooperation. The result is that while rhetorical alliances can be conducted at arm's length with less immediate risk to security, this is infeasible in the context of material alliances. We therefore expect the cooperation-enhancing effects of shared ideology in the face of repression to be concentrated in the context of material cooperation.

While security concerns and commitment problems are less acute in the context of rhetorical cooperation, this does not imply that state repression has no impact on rhetorical relationships. Because the functional value of rhetorical support is contingent on both the performance of the ally vis-à-vis the state and the extent to which it imposes reputation costs, these relationships also become riskier as repression

increases. Repression can reduce the selectivity of the violence that militant groups engage in⁵⁴ and lead to operational setbacks or collapse.⁵⁵ Increased repression, therefore, raises the risk that a group's allies will engage in counterproductive civilian victimization and/or collapse outright. These will concern groups involved in rhetorical alliances because of the greater reputational costs they entail. In sum, the risks of rhetorical cooperation grow with increased repression, but the benefits do not. Moreover, these risks are not conditioned by shared ideology because they are divorced from concerns over bilateral security and trust.⁵⁶

The Militant Group Alliances and Relationships Data Set

To assess these expectations, we collected time-series data on all known militant relationships from 1950 through 2016, which we introduce here as the MGAR data set.⁵⁷ We consider all independent, violent, nonstate organizations. This includes groups described as terrorists, rebels, and civil war actors around the world. As such, these data provide an important extension to those that focus on terrorist⁵⁸ or rebel groups⁵⁹ in isolation. The unit of analysis is the undirected dyad-year, which allows us to model evolving relationships among militant actors over time, including change and termination.

We began by creating a comprehensive list of militant organizations from existing data sets, and then mapping on the militant relationships identified in other data, including the Terrorist Organizational Profiles (TOPS) database,⁶⁰ the Global Terrorism Database (GTD),⁶¹ and the Armed Conflict Dataset (ACD).⁶² From there, we investigated the alliances and either confirmed or discarded them; for those we confirmed, we added a time-series component and characterizations of the nature of the cooperation.

With existing data verified, we turned to the task of identifying previously unknown relationships. To do so, we assigned teams of researchers with relevant language skills to countries and gave them a list of all known militant groups ever active in that country. The teams coded relationships and also added organizations they uncovered that were missing from existing data sets.⁶³

54. Abrahms and Potter 2015.

55. Price 2018.

56. However, rhetorical alliances are more likely among groups with similar ideologies, as we highlight later.

57. The MGAR codebook is available in section A.1 in the online appendix.

58. Asal and Rethemeyer 2008; Hou, Gaibulloev, and Sandler 2020.

59. Bapat and Bond 2012; Christia 2012.

60. National Memorial Institute for the Prevention of Terrorism 2006.

61. National Consortium for the Study of Terrorism and Responses to Terrorism (START) 2019.

62. Pettersson and Öberg 2020.

63. Teams were comprised of undergraduate and graduate researchers. The researchers were trained in Boolean search techniques, databases (e.g., Factiva, Lexis-Nexis, Newsbank, Google Scholar, JSTOR, Ebsco, and ISI World of Science), and library web portals. By casting a broad net, coders used a diverse array of sources to identify as much information as possible. Researchers also had to pass several rounds of training exercises to ensure that they were consistently identifying and recording data. For more coding details see Sections A.1 and A.3 in the online appendix.

The process of documenting these relationships builds on a substantial body of prior research. We supplement and link together related data from TOPS, GTD, ACD, the Big Allied and Dangerous database,⁶⁴ the Minorities at Risk Organizational Behavior data set,⁶⁵ and the Mapping Militant Organizations project,⁶⁶ among others. We have maintained identifiers from these data and matched our data with TORG crosswalk identifiers⁶⁷ to allow researchers to link our data with other work in the field.⁶⁸ The goal is to contribute to an aggregation of knowledge about militant networks that is open-source, adaptable, and widely available.⁶⁹

The resulting MGAR data set consists of 7,402,203 undirected dyad-year observations, including 1,318,819 unique undirected dyads and 2,613 unique militant groups.⁷⁰ The data set includes 7,409 undirected dyad-years in which a relationship exists between groups, of which 5,918 are cooperative and 1,491 are hostile.⁷¹ Though not employed in this analysis, the full data set is even larger because it also includes alliances between militant groups and states, diaspora communities, political parties, and nonviolent organizations. The sheer number of ties identified in our data belies the notion that militant organizations primarily operate in isolation to preserve secrecy and security—there is a dense web of relationships, which we outline in the data description that follows.

MGAR captures when each relationship began and ended, and what it entailed. We provide a categorization of the nature of the relationship between groups, ranging from allies (the strongest form of cooperation) to associates, supporters, fans (verbal but not material support), hosts (primarily states), rivals, and competitors (the strongest form of conflict). For each cooperative dyad-year we also code whether the relationship included operational (e.g., shared membership, joint operations, tactical advising), material (i.e., arms transfers), territorial (e.g., shared bases), training, or financial support (i.e., cash transfers). Both the categorical and content variables are time variant.

These distinctions in the data allow us to isolate material from purely rhetorical cooperation. Material alliances are those in which at least one of the following is exchanged: operational, material, territorial, training, or financial support. Rhetorical alliances are defined as those in which groups are cooperative but none of these forms of physical support is exchanged.⁷²

64. Asal and Rethemeyer 2008.

65. Wilkenfeld, Asal, and Pate 2011.

66. Crenshaw 2019.

67. Project on Violent Conflict, Rockefeller College of Public Affairs and Policy, University at Albany, State University of New York, available at <<https://www.albany.edu/pvc/data.shtml>>.

68. Asal, Cousins, and Gleditsch 2015.

69. For more information on the relationship between MGAR and other research, see section A.2 in the online appendix.

70. The complete data set is available at <<http://mgardata.org/>>.

71. Figure A.4.

72. All results are substantively identical if we distinguish material from rhetorical alliances based on our categorical relationship coding. In this formulation, material alliances are defined as allies, associates, supporters, and hosts, while rhetorical alliances are fans (Appendix Table A.27, Figure A.28).

Descriptive Overview

Data from MGAR reveal important patterns in militant cooperation. The absolute number of alliances between militant groups is substantial (Figure 1). In general, alliances were relatively more common between 1965 and 1980, before declining from 1980 to 1990, and then increasing steadily again from 1990. The degree of militant cooperation—both initiation and durability—peaked in relative terms in 1970. These trends in militant cooperation reflect well-known political dynamics. From 1965 to 1980, the systemic political environment was characterized by decolonization struggles, global ideological contestation, and substantial state sponsorship of militant organizations, all of which facilitated alliance formation and maintenance by injecting militant groups with resources and revolutionary ideological currency.⁷³

As the decolonization concluded and the Cold War waned from 1980 to 1990, militant cooperation declined in absolute and relative terms. The dissolution of multi-ethnic empires and the proliferation of weak states gave rise to the creation of many new militant groups (i.e., potential alliance partners), but waning ideological contestation and state sponsorship reduced the ideological and material resources vital for alliance formation and maintenance.⁷⁴ Intuitively, Figure 2 shows that the relative decrease in cooperation in this era is driven by a decline in alliances between leftist groups, precisely those most affected by the decline of ideological contestation and state sponsorship in the late Cold War.

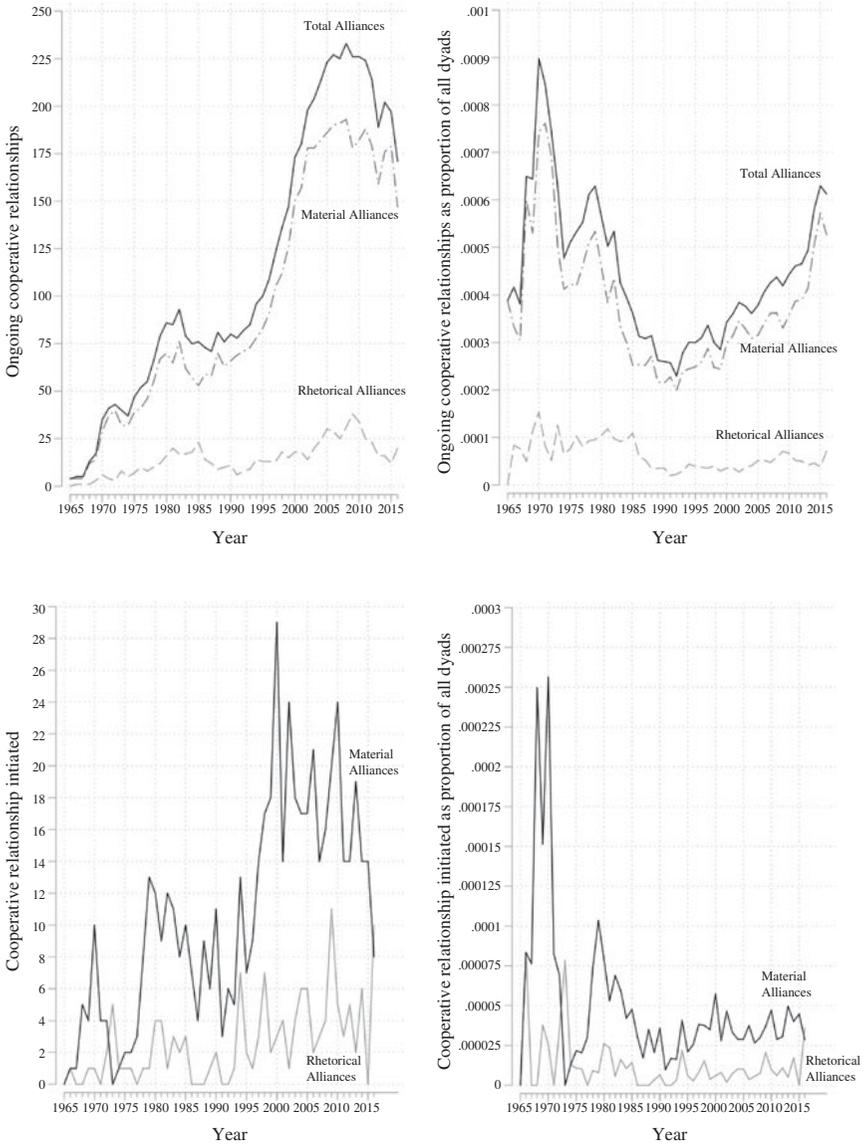
Since 1990, militant cooperation has increased steadily. This increase is driven by the rise of alliances between groups sharing a religious ideology. As religious ideologies, especially Salafism, supplanted communism as the dominant global, militant ideological currency after the Cold War, religiously oriented cooperation proliferated.⁷⁵ By 2016, the global proportion of militant dyads that were allied rebounded to its 1980 level. As of 2016, there were forty rhetorical and 294 material alliances between militant groups, including twenty rhetorical and sixteen material alliance initiations. These figures amount to cooperation in more than one-tenth of 1 percent of all militant undirected dyads worldwide.

Alliance initiation has remained relatively constant since the mid-1980s, and has not increased along with the total increase in militant cooperation since 1990. This suggests that the total increase in militant cooperation is driven in large measure by the growing durability of alliances, not by an increased ability of groups to form alliances in the post-Cold War era. This insight suggests the possibility that alliance initiation and maintenance have different causes, and particularly that shared ideology (e.g., co-religion) may be more important for sustaining than for initiating cooperation under repression.

73. Kalyvas and Balcells 2010.

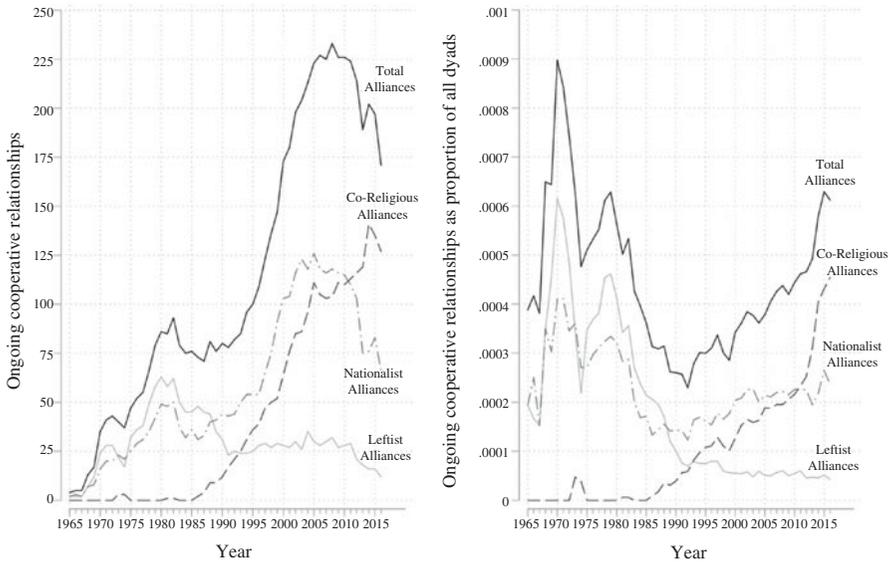
74. Ibid. 416–19.

75. Hegghammer 2020.



Notes: The top-left panel depicts the total number of alliances between militant groups over time disaggregated by the type of alliance. Material alliances are defined as those in which at least one of the following is exchanged: operational, material, territorial, training, or financial support. Rhetorical alliances are defined as those in which groups are cooperative but physical support is absent. The top-right panel normalizes the number of alliances over time by the total number of undirected dyads per year. The bottom-left panel depicts the total number of alliance initiations between militant groups over time disaggregated by the type of alliance. The bottom-right panel normalizes the number of alliance initiations over time by the total number of undirected dyads per year.

FIGURE 1. *Militant alliances by type*



Notes: The left panel depicts the total number of alliances between militant groups over time disaggregated by the ideology allies share. The right panel normalizes the number of alliances over time by the total number of undirected dyads per year. We also record alliances between groups sharing right-wing and environmentalist ideologies, but religion, nationalism/separatism, and leftism/communism are overwhelmingly the most common ideologies shared in alliances.

FIGURE 2. *Militant alliances by shared ideology*

Apart from broad trends in the degree of militant cooperation, Figure 1 also reveals an important difference in patterns of rhetorical and material cooperation. In particular, material alliances are far more frequent than rhetorical alliances, accounting for about 84 percent of all alliance-years in the data. While the degree of rhetorical cooperation is relatively constant over time, material cooperation is subject to far more temporal variation, with peaks in the periods from 1965 to 1980 and from 1990 to 2016. Looking at alliance formation, rhetorical alliance initiation outpaces material alliance initiation in only two years: 1973 and 2016. In 1973, the stark increase in rhetorical alliance formation reflects the rise of nonmaterial cooperation between prominent, mostly leftist groups in the Middle East, Western Europe, and Latin America. Responding to increasing repression in the wake of events like the Munich massacre, the Yom Kippur War, and the Ezeiza massacre in Argentina, leftist/communist groups mobilized to rhetorically support ideological compatriots around the world.⁷⁶ The 2016 surge in rhetorical alliance formation reflects a deliberate strategy by ISIS to legitimate its claim of a caliphate by extracting loyalty

76. Karmon 2005.

pledges from a network of global affiliates.⁷⁷ Some of those initially rhetorical alliances have since matured into material alliances.

Many of the most lethal militant alliance networks, such as those of ISIS, stretch across continents; at the the same time, large militant networks also emerge within individual countries. Because the MGAR data capture relationships for a large, global sample of militant groups, they offer a unique opportunity to explore the dynamics of domestic versus transnational cooperation.⁷⁸ Figure 3 distinguishes alliances between groups based in the same or neighboring countries (domestic) from alliances between groups based in noncontiguous countries (transnational).⁷⁹ Domestic alliances are more common, accounting for about 68 percent of all alliance-years. Notably, the ebb and flow of domestic and transnational cooperation follow similar trends over time.

Table 1 provides summary statistics for core variables in our data for all dyad-years and for cooperative dyad-years. These offer a broader portrait of the MGAR data and echo many of the insights highlighted graphically in Figures 1 through 3. The alliance content variables, including the disaggregation of material and rhetorical alliances, correspond to the content variables described before, while the relationship-type variables correspond to the categorical coding we described. The data show that of the five types of support we code, operational support is most common, occurring in about 65 percent of all alliance dyad-years. Training and material support are also frequent, occurring in 57 percent and 56 percent, respectively; territorial and financial support are less common, occurring in 40 percent and 48 percent, respectively. The mean and median number of forms of support exchanged in an alliance dyad-year is 3, indicating that most militant cooperation yields the exchange of relatively numerous and robust material resources.

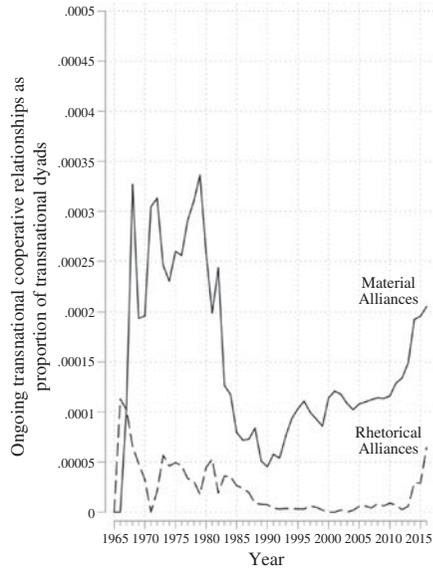
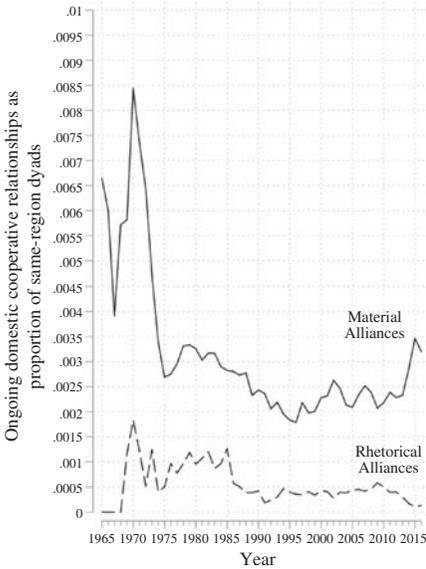
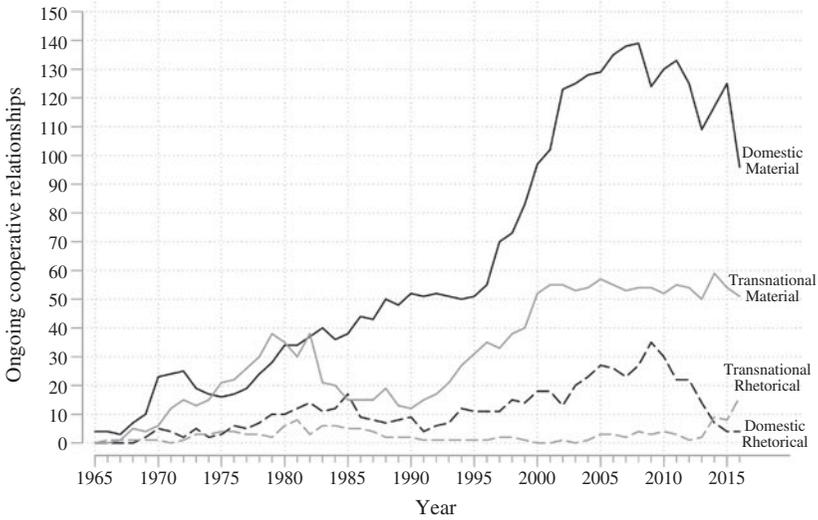
Ideology is shared in more than 91 percent of all alliance dyad-years. Shared religion is particularly significant: religion is shared in just 6 percent of all undirected dyad-years but in 37 percent of alliance dyad-years. Consistent with work on state sponsors, we find that shared sponsorship also occurs disproportionately in alliance dyad-years.⁸⁰ Still, shared sponsorship is not present in about 95 percent of alliance dyad-years, so other commitment mechanisms must also exist to support the observed extent of militant cooperation. Finally, even in the summary statistics it is clear that most militant groups generally, and most alliances dyad-years specifically, operate in highly repressive contexts.

77. Potter, Plapinger, and Blair 2020.

78. Enders, Sandler, and Gaibulloev 2011.

79. Many explicitly domestic groups operating in peripheral regions of weak states ally with similarly motivated groups operating nearby but based across official borders. For instance, the Democratic Forces for the Liberation of Rwanda cooperated with the National Liberation Front of Burundi in the Second Congo War (same conflict ecosystem), despite the groups technically being based in different countries. All results are substantively identical if we define domestic alliances as those between groups based only in the same country.

80. Bapat and Bond 2012; Popovic 2018.



Notes: The top panel depicts the total number of alliances between militant groups over time disaggregated by the geographic scope of the alliance. Domestic alliances are between groups based in the same region (defined as the same country or contiguous countries). Transnational alliances are between groups based in noncontiguous countries. The bottom-left panel normalizes the number of alliances over time by the total number of undirected dyads in the same region per year. The bottom-right panel normalizes the number of alliances over time by the total number of transnational undirected dyads per year.

FIGURE 3. Militant alliances by geographic scope

TABLE 1. *MGAR summary statistics*

| | <i>All undirected dyad-years</i> | | | | | <i>Alliance undirected dyad-years</i> | | | | |
|-------------------------------|----------------------------------|-------------|------------------|-------------|-------------|---------------------------------------|-------------|------------------|-------------|-------------|
| | <i>Obs.</i> | <i>Mean</i> | <i>Std. dev.</i> | <i>Min.</i> | <i>Max.</i> | <i>Obs.</i> | <i>Mean</i> | <i>Std. dev.</i> | <i>Min.</i> | <i>Max.</i> |
| Alliance content | | | | | | | | | | |
| Material alliance | 7,402,203 | 0.0007 | 0.026 | 0 | 1 | 5,918 | 0.841 | 0.365 | 0 | 1 |
| Rhetorical alliance | 7,402,203 | 0.0001 | 0.010 | 0 | 1 | 5,918 | 0.126 | 0.332 | 0 | 1 |
| Content sum | 7,402,203 | 0.002 | 0.093 | 0 | 5 | 5,918 | 2.655 | 1.831 | 0 | 5 |
| Operational support | 7,402,203 | 0.0005 | 0.023 | 0 | 1 | 5,918 | 0.652 | 0.476 | 0 | 1 |
| Material support | 7,402,203 | 0.0005 | 0.021 | 0 | 1 | 5,918 | 0.556 | 0.497 | 0 | 1 |
| Territorial support | 7,402,203 | 0.0004 | 0.020 | 0 | 1 | 5,918 | 0.479 | 0.500 | 0 | 1 |
| Training support | 7,402,203 | 0.0005 | 0.022 | 0 | 1 | 5,918 | 0.571 | 0.495 | 0 | 1 |
| Financial support | 7,402,203 | 0.0003 | 0.018 | 0 | 1 | 5,918 | 0.397 | 0.489 | 0 | 1 |
| Relationship type | | | | | | | | | | |
| Allies | 7,402,203 | 0.0002 | 0.015 | 0 | 1 | 5,918 | 0.282 | 0.450 | 0 | 1 |
| Associates | 7,402,203 | 0.0003 | 0.016 | 0 | 1 | 5,918 | 0.320 | 0.467 | 0 | 1 |
| Supporters | 7,402,203 | 0.0002 | 0.014 | 0 | 1 | 5,918 | 0.255 | 0.436 | 0 | 1 |
| Hosts | 7,402,203 | 0.0000005 | 0.002 | 0 | 1 | 5,918 | 0.006 | 0.077 | 0 | 1 |
| Fans | 7,402,203 | 0.0001 | 0.010 | 0 | 1 | 5,918 | 0.136 | 0.343 | 0 | 1 |
| Rivals | 7,402,203 | 0.00009 | 0.009 | 0 | 1 | — | — | — | — | — |
| Competitors | 7,402,203 | 0.0001 | 0.011 | 0 | 1 | — | — | — | — | — |
| Dyadic characteristics | | | | | | | | | | |
| Shared ideology | 7,402,203 | 0.576 | 0.494 | 0 | 1 | 5,918 | 0.915 | 0.279 | 0 | 1 |
| Shared religion | 7,402,203 | 0.063 | 0.244 | 0 | 1 | 5,918 | 0.367 | 0.482 | 0 | 1 |
| Shared leftism/communism | 7,402,203 | 0.136 | 0.343 | 0 | 1 | 5,918 | 0.263 | 0.440 | 0 | 1 |
| Shared nationalism/separatism | 7,402,203 | 0.372 | 0.483 | 0 | 1 | 5,918 | 0.516 | 0.500 | 0 | 1 |
| Shared right-wing | 7,402,203 | 0.093 | 0.291 | 0 | 1 | 5,918 | 0.040 | 0.195 | 0 | 1 |
| Shared environmentalism | 7,402,203 | 0.0002 | 0.013 | 0 | 1 | 5,918 | 0.0007 | 0.026 | 0 | 1 |
| Repression | 7,371,667 | 1.825 | 0.776 | -3.386 | 3.767 | 5,917 | 1.720 | 0.883 | -2.009 | 3.370 |
| Shared state sponsor | 6,083,384 | 0.0003 | 0.018 | 0 | 1 | 5,474 | 0.046 | 0.208 | 0 | 1 |
| Capability ratio | 7,402,203 | 0.623 | 0.216 | 0.500 | 1 | 5,918 | 0.765 | 0.235 | 0.500 | 1 |
| Age (Group 1) | 7,402,203 | 15.722 | 14.504 | 1 | 151 | 5,918 | 16.654 | 12.991 | 1 | 120 |
| Age (Group 2) | 7,402,203 | 14.806 | 15.981 | 1 | 151 | 5,918 | 17.664 | 15.192 | 1 | 121 |
| Age difference | 7,402,203 | 14.728 | 15.153 | 0 | 150 | 5,918 | 11.174 | 12.080 | 0 | 116 |
| Geographic scope | | | | | | | | | | |
| Same state | 7,402,203 | 0.034 | 0.182 | 0 | 1 | 11,836 | 0.481 | 0.500 | 0 | 1 |
| Same region | 7,402,203 | 0.091 | 0.288 | 0 | 1 | 11,836 | 0.678 | 0.467 | 0 | 1 |
| Transnational | 7,402,203 | 0.889 | 0.314 | 0 | 1 | 11,836 | 0.315 | 0.464 | 0 | 1 |

Empirical Strategy

To test our hypotheses, we start with the list of 2,613 unique militant groups in MGAR, and create an undirected dyadic data frame that links each militant group to every other contemporaneous militant group for each year of each group's existence. This procedure yields 7,402,203 observations, reflecting every undirected dyad-year in which a relationship *could* exist. Hence, our unit of analysis is the militant group undirected dyad-year.

The dependent variable captures whether an alliance exists between groups in an undirected dyad-year and, if so, the nature of the alliance: rhetorical or material. We distinguish between alliance initiation and durability (i.e., duration) to test Hypotheses 1 and 2, respectively. The dependent variable in our principal analyses is defined using the alliance content variables: operational, material, territorial, training, and financial support. If one or more of these forms of support is exchanged in a dyad-year we code the alliance as material. If an alliance exists but evidence suggests that none of these five forms of support was exchanged, we code the alliance as rhetorical. In dyad-years ($n = 376$) where data on the various forms of support are missing because insufficient information existed to make a determination, we code no alliance.⁸¹

To establish the robustness of the finding we also assess a version of the dependent variable derived from a categorical variable in MGAR that captures relationship type: none, allies, associates, supporters, hosts, fans, rivals, or competitors. In this formulation, material alliances are defined as allies, associates, supporters, or hosts, and rhetorical alliances are defined as fans. We employ the content-based variable in our primary analyses because it is based on objective information about the repertoires of support within alliances; by contrast, the categorical variable is based on coders' more subjective assessments of the relationship. Nevertheless, these measures are highly correlated ($\rho = 0.973$), and all results are robust to the choice of measure.⁸²

The primary independent variables are SHARED IDEOLOGY and REPRESSION. Shared ideology is a dichotomous indicator based on the MGAR group ideology variables. We coded whether each group was leftist/communist, nationalist/separatist, far-right-wing, or environmentalist, along with a categorical variable for each group's religious identity. As we have noted, there is relative consensus in the literature that ideologies can be overlapping but are generally slow moving. In response, our coding categories are not mutually exclusive but are time invariant. We define shared ideology dyads as those in which both constituent groups share a secular or religious ideology. For instance, Basque Fatherland and Freedom and the Irish Republican Army are coded as sharing ideology because both groups are nationalist/separatist.⁸³

81. We model this missingness in Appendix Table A.5. Results are substantively identical if we treat these dyad-years as missing.

82. Appendix Tables A.6 and A.7 show cross-tabulations of the two measures.

83. As this example suggests, we do not require that nationalist/separatist groups represent the same ethnic or national group in order to register as sharing ideology. Rapoport 2004 shows that nationalist/

We measure repression using Fariss's latent human rights index.⁸⁴ Fariss produces a dynamic latent variable model of physical integrity rights—individuals' rights to protection from arbitrary bodily harm and coercion. The index combines information on torture, political imprisonment, disappearances, and extrajudicial killings. We reverse-scaled the indicator for ease of interpretation, so higher values mean more repression and less respect for human rights. We measure repression dyadically: our repression score is the maximum value of the reverse-scaled rights index across the countries in which the two groups are based. All results are substantively similar when we measure repression with the CIRI physical integrity rights index.⁸⁵ Both the Fariss and CIRI measures vary across countries and over time.⁸⁶ Because we are primarily interested in the effect of shared ideology on militant cooperation as repression increases, we interact the shared ideology indicator with our repression measure.

Covariates

Properly specifying our models requires controls for dyadic, organizational, and country-level covariates. We account for the age of each group, as well as differences in ages, because older groups tend to be more institutionalized and bureaucratized, and therefore more resilient in the face of repression.⁸⁷ MGAR codes the lifespan of organizations with start and end dates, facilitating the straightforward measurement of organizational age. Similarly, we control for whether two groups share a state sponsor, since sponsors can enforce cooperation. Our shared sponsorship measure is derived from MGAR data on cooperation between states and militant groups. To measure relational capability symmetry we focus on the ratio of the most violent group's attacks to the number of combined attacks within the undirected dyad, according to data from the GTD.⁸⁸

At the country level, the models account for inter-capital distance (logged + 1) between the two countries in which the militant groups in a dyad are based, since proximity affects the likelihood that groups will interact.⁸⁹ Likewise, we control for the population (logged + 1) and GDP per capita (logged + 1) of the countries in

separatist groups often forge cross-cultural connections (e.g., Basque and Irish) in support of a general spirit of separatism.

84. Fariss 2019.

85. CIRI Human Rights Dataset 2014. Appendix Table A.27, Figure A.28.

86. Figure A.8 shows the distribution of these variables.

87. Shapiro 2013.

88. Capability ratio = $\frac{\max(\text{Group 1 Attacks}+1) \text{ or } (\text{Group 2 Attacks}+1)}{(\text{Group 1 Attacks}+1)+(\text{Group 2 Attacks}+1)}$. Attack counts for both groups in a dyad are lagged by one year and transformed by adding 1 to avoid dropping dyad-years in which both groups are in GTD but neither conducts an attack. Our capability ratio measure ranges from 0.5, indicating parity, to 1, indicating that one group is much stronger than the other. Instances in which no attacks are identified in GTD take the minimum value, rather than a missing value. However, results are robust to using a capability ratio in which these observations are treated as missing. Data from MGAR and GTD are merged using unique group identifiers from TORG and MGAR.

89. Gaibullov 2015. This variable takes a value of 0 for groups based in the same country.

which each militant group is based. Larger and wealthier countries may have superior repressive capacity. At the same time, larger countries can host more militant groups, and large and prosperous countries might produce pools of skilled recruits, raising the attractiveness of cooperation with groups based in these states. We control for the number of US troops (logged + 1) in each country because countries with more US troops are likely to have greater repressive capacity but may also experience more militancy.⁹⁰ Since diverse countries with large ethnic-minority populations may be more conflict prone, we control for ethnic fractionalization in each country. Finally, to capture the links between regime type and terrorism, we include the Polity score of each country, along with its squared term.⁹¹ Covariates are lagged one year to mitigate temporal confounding.⁹²

Estimation

We take two primary modeling strategies in our main analyses: a series of multinomial logistic regressions to test Hypothesis 1 (on alliance initiation) and a series of variance-corrected hazard models to test Hypothesis 2 (on alliance durability). We opt for multinomial logistic regression to model alliance initiation because our dependent variable is a three-point, categorical measure, where 0 means no alliance initiation, 1 means rhetorical alliance initiation, and 2 means material alliance initiation. Because we are interested in the differences between rhetorical and material alliance formation, 0 serves as our reference category. Thus, in the multinomial logistic approach, we estimate two equations: one for rhetorical alliances relative to no alliance and one for material alliances relative to no alliance. The multinomial logistic framework allows us to estimate the relative probabilities of our different outcomes—rhetorical or material alliance initiation—from the same sample, rather than from independent samples as in standard logistic regression. It also has the advantage that it makes no assumptions about proportional odds as in an ordered logistic regression.⁹³

Our multinomial logistic models are expressed as

$$Pr(Y_{d,t} = \text{ALLIANCE INITIATION CATEGORICAL}) = \text{Logit}(\alpha_0 + \beta(\text{SHARED IDEOLOGY}_{d,t}) + \gamma(\text{REPRESSION}_{d,t-1}) + \delta(\text{SHARED IDEOLOGY}_{d,t})(\text{REPRESSION}_{d,t-1}) + \theta(X_{u,s}) + \epsilon_{d,t})$$

where the outcome is the initiation of a rhetorical or material alliance, d indexes undirected dyads, and t indexes years. α_0 denotes the constant, and δ gives the effect of shared ideology as repression increases in undirected dyad d in year $t = 1$. θ are estimates from a vector of covariates, and $\epsilon_{d,t}$ are undirected dyad-clustered standard errors.

90. Kane 2016.

91. Gaibulloev, Piazza, and Sandler 2017.

92. Appendix Table A.9 gives variable definitions, and Table A.10 gives additional summary statistics.

93. Ordered logistic estimates are substantively identical (Table A.23).

To test Hypothesis 2, on alliance durability, we turn to variance-corrected hazard models. This approach allows us to directly estimate the effect of shared ideology, conditioned on repression, on the time to militant alliance termination. In these analyses we subset the data to cooperative dyad-years and code termination when groups experience alliance discontinuation (i.e., an alliance in year $t-1$ and not in year t).

While not widely recognized in the literature on militant cooperation, repeated failures are common in the data. Many militant groups terminate alliances only to re-ally with former partners in the future. For instance, the Palestine Liberation Organization (PLO) and the Popular Front for the Liberation of Palestine (PFLP) first allied from 1968 to 1973. PLO–PFLP cooperation broke down in 1974 when the PFLP joined the Rejectionist Front in opposition to the PLO’s adoption of the Ten-Point Plan. Nevertheless, the PLO–PFLP alliance reemerged in 1981 when the PFLP rejoined the PLO Executive Committee. It terminated a second time in 1999 amid lingering debate over the merits of conciliation with Israel.

In traditional hazard modeling approaches, event times are assumed to be conditionally independent. This assumption does not hold in our framework because the risk of failure is correlated within units. Clustering of terminations among dyads means that previous failures raise the risk of future failures. Given the threat of event dependence, we employ a variance-corrected gap-time Cox estimator.⁹⁴ This model stratifies the risk set by the number of failures a dyad has experienced to control for event dependence and clusters standard errors by undirected dyad to account for within-dyad correlations between failures. The estimator uses gap time because we are interested in modeling the time since the last failure. By employing the Cox estimator, we make no additional parametric assumptions about the shape of the underlying hazard function.⁹⁵

The hazard in this framework can be written as

$$\lambda_{d,s}(t) = \lambda_{0s}(t - t_{s-1})e^{\beta(\text{SHARED IDEOLOGY}_{d,t}) + \gamma(\text{REPRESSION}_{d,t-1}) + \delta(\text{SHARED IDEOLOGY}_{d,t})(\text{REPRESSION}_{d,t-1}) + \theta(X_{d,t})}$$

where the outcome is the termination of a rhetorical or material alliance, d indexes undirected dyads, and s denotes the cumulative number of alliance breakdowns within the dyad, which stratifies the risk set. λ_{0s} is the baseline hazard rate, and $t - t_{s-1}$ specifies a gap-time formulation, where the hazard is the risk of failure for alliance breakdown s since the occurrence of alliance breakdown $s - 1$. δ gives the effect of shared ideology as repression increases in undirected dyad d in year $t - 1$. θ are estimates from a vector of covariates. In all models, we cluster standard errors by undirected dyad and use Efron’s method for ties.

94. Box-Steffensmeier and Jones 1997.

95. The results are substantively identical using alternative estimators (Appendix Tables A.12 and A.14; Figure A.13).

Results

Our quantitative tests proceed in two steps. To assess Hypothesis 1 we use multinomial logistic regressions to test the effect of shared ideology and repression on the initiation of rhetorical versus material alliances. To assess Hypothesis 2 we use variance-corrected gap-time Cox hazard models to test the effect of shared ideology and repression on the durability of rhetorical versus material alliances.

Alliance Initiation

Hypothesis 1 posits that shared ideology facilitates the initiation of cooperation when militant groups face repression. We test this expectation in [Table 2](#), which presents estimates from two multinomial logit models. In columns 1 and 3 we present baseline results from a model with terms for shared ideology and repression but not their interaction. In columns 2 and 4 we add an interaction term between shared ideology and repression to test whether repression conditions the effect of shared ideology, and set up the tests of Hypothesis 2 in what follows.

Replicating findings from prior research, we find that both rhetorical and material alliances are more likely to form between groups sharing an ideology.⁹⁶ Repression has an unconditional negative effect on the probability of rhetorical alliance initiation, and a weakly negative but imprecisely estimated unconditional effect on material initiation. These results broadly corroborate our core intuition that repression strains militant cooperation. Results from the interactive model (columns 2 and 4) offer additional insight. Significant negative coefficients on the interaction term suggest that among dyads that share an ideology, repression reduces the probability of both rhetorical and material alliance initiation. In other words, the alliance-inhibiting effect of repression is most critical among dyads otherwise most likely to cooperate because they share an ideology.

To contextualize the substantive magnitude of these effects, in [Figure 4](#) we plot the average marginal effect of shared ideology on the probability of each outcome in our multinomial estimator (no alliance initiation, rhetorical alliance initiation, material alliance initiation) based on results from the interactive model in [Table 2](#). The average marginal effect captures the average effect of moving from a dyad without shared ideology to one with shared ideology. Shared ideology significantly reduces the probability that a dyad is not allied and significantly increases the probability that a dyad initiates a rhetorical or material alliance. Consistent with H1, shared ideology has a significant, positive effect on rhetorical and material initiation at all values of repression. However, the magnitude of this effect attenuates as repression moves from its tenth to ninetieth percentiles, reducing the positive

96. Bacon 2018; Christia 2012; Gade et al. 2019.

effect of shared ideology 50 percent for rhetorical initiation and 22 percent for material initiation.

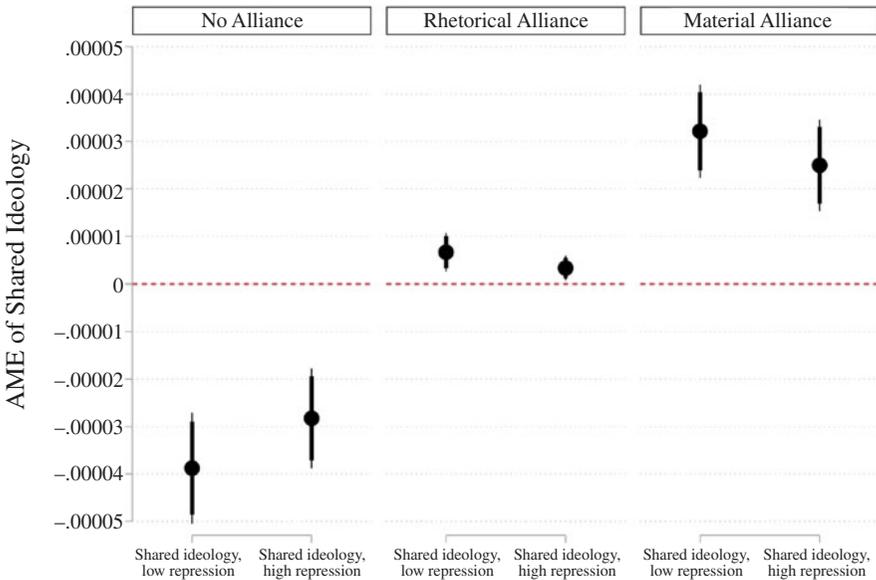
TABLE 2. *Multinomial logit models of alliance initiation*

| Variables | DV: Rhetorical alliance initiation | | DV: Material alliance initiation | |
|------------------------------------|------------------------------------|-----------------------|----------------------------------|----------------------|
| | (1) | (2) | (1) | (2) |
| SHARED IDEOLOGY | 1.516*** (0.465) | 2.024*** (0.523) | 1.372*** (0.208) | 2.015*** (0.467) |
| REPRESSION | -0.319** (0.148) | -0.019 (0.193) | -0.014 (0.079) | 0.307 (0.206) |
| SHARED IDEOLOGY × REPRESSION | | -0.318* (0.183) | | -0.348* (0.211) |
| CAPABILITY RATIO | 2.588*** (0.390) | 2.581*** (0.389) | 2.248*** (0.193) | 2.245*** (0.193) |
| SHARED SPONSOR | 2.818*** (0.692) | 2.831*** (0.692) | 3.783*** (0.288) | 3.797*** (0.288) |
| AGE DIFFERENCE | -0.032*** (0.012) | -0.032*** (0.012) | -0.016*** (0.006) | -0.016*** (0.006) |
| AGE (GROUP 1) | 0.006 (0.009) | 0.006 (0.009) | -0.007 (0.005) | -0.007 (0.005) |
| AGE (GROUP 2) | 0.017* (0.009) | 0.017* (0.009) | 0.010** (0.005) | 0.010** (0.005) |
| INTER-CAPITAL DISTANCE | -0.463*** (0.033) | -0.463*** (0.033) | -0.415*** (0.015) | -0.415*** (0.015) |
| POLITY (GROUP 1) | -0.038 (0.026) | -0.038 (0.026) | -0.024* (0.013) | -0.024* (0.013) |
| POLITY ² (GROUP 1) | -0.000 (0.006) | -0.000 (0.006) | 0.004 (0.003) | 0.004 (0.003) |
| POLITY (GROUP 2) | -0.037 (0.027) | -0.037 (0.027) | -0.005 (0.013) | -0.005 (0.013) |
| POLITY ² (GROUP 2) | 0.001 (0.006) | 0.001 (0.006) | 0.000 (0.003) | 0.000 (0.003) |
| ETHNIC FRACTIONALIZATION (GROUP 1) | -1.761*** (0.569) | -1.764*** (0.567) | -1.012*** (0.328) | -1.020*** (0.327) |
| ETHNIC FRACTIONALIZATION (GROUP 2) | 1.123* (0.621) | 1.118* (0.620) | 0.422 (0.311) | 0.418 (0.311) |
| POPULATION (GROUP 1) | -0.135 (0.117) | -0.135 (0.117) | -0.237*** (0.060) | -0.235*** (0.060) |
| POPULATION (GROUP 2) | 0.031 (0.149) | 0.032 (0.149) | 0.175*** (0.055) | 0.176*** (0.055) |
| GDP PER CAPITA (GROUP 1) | -0.110 (0.152) | -0.111 (0.152) | -0.174** (0.084) | -0.176** (0.084) |
| GDP PER CAPITA (GROUP 2) | 0.249 (0.163) | 0.248 (0.164) | -0.016 (0.085) | -0.018 (0.086) |
| US TROOPS (GROUP 1) | 0.075 (0.065) | 0.074 (0.065) | 0.045 (0.035) | 0.044 (0.035) |
| US TROOPS (GROUP 2) | -0.090 (0.081) | -0.090 (0.081) | -0.040 (0.035) | -0.039 (0.035) |
| CONSTANT | -10.725*** (1.799) | -11.190*** (1.808) | -7.139*** (0.857) | -7.708*** (0.968) |
| Observations | 4426788 | 4426788 | 4426788 | 4426788 |
| Pseudo-R ² | 0.181 | 0.182 | 0.181 | 0.182 |

Notes: Multinomial logit coefficients with robust standard errors clustered by undirected dyad in parentheses; time-variant covariates lagged one year. * $p < .10$, ** $p < .05$, *** $p < .01$.

Turning from our focal variables to the other covariates, some other factors emerge as substantively important for alliance formation. Past work suggests that groups that

share a state sponsor find it easier to sustain cooperation in the face of repression.⁹⁷ Large, precisely estimated positive coefficients across the shared sponsorship term are consistent with this view. Results in column 2 suggest that dyads that share a sponsor are 0.0009 percentage points more likely to initiate a rhetorical alliance and 0.0008 percentage points more likely to initiate a material alliance than dyads lacking shared sponsorship. Though these numbers seem small, this is an artifact of the unit of analysis; these effects are substantively meaningful.



Notes: Thick and thin bars are 90 percent and 95 percent confidence intervals, respectively. The dashed line marks 0. Low and high repression refer to the tenth and ninetieth percentiles of the repression variable.

FIGURE 4. *The effect of shared ideology on alliance initiation*

Coefficients on the capability ratio suggest that alliance initiation is more likely between asymmetrically capable groups and significantly less likely for groups at relative parity. This finding echoes research showing that weaker militant organizations often seek powerful partners, leveraging alliance connections to bolster their capabilities and prestige.⁹⁸ Other factors like inter-capital distance and the age difference between groups also negatively affect initiation of both rhetorical and material cooperation. Militant groups locate bases strategically to facilitate contact with other groups, while distance raises the transaction costs of forming and sustaining

97. Bapat and Bond 2012; Popovic 2018.

98. Asal and Rethemeyer 2008; Horowitz and Potter 2014; Horowitz, Perkowski, and Potter 2018.

cooperation.⁹⁹ Similarly, groups prefer partners with similar ages (and levels of bureaucratization), since alliances between highly and weakly institutionalized groups increase internal security risks.¹⁰⁰

Alliance Durability

The results in [Table 2](#) suggest that shared ideology is important for the formation of militant alliances, and that repression helps degrade alliance formation between groups otherwise most likely to cooperate because of shared ideology. As we have noted, however, alliance formation and alliance durability are distinct processes. Once groups agree to initiate ties, they must work to sustain them. The difficulty of this task grows as repression increases. We posit that shared ideology can bolster commitment and thereby facilitate alliance maintenance under repression, specifically by lengthening the shadow of the future, easing monitoring and enforcement, leveraging common authority structures, and enhancing trust.

We test the effect of shared ideology on alliance durability as repression increases in [Figure 5](#), employing the same set of covariates from [Table 2](#). We rely on graphs to relay this information in response to the particular difficulty of interpreting coefficients from interactions in Cox models, but full tabular results are available in the online appendix.¹⁰¹ Our dependent variables are separate indicators for rhetorical alliance termination and material alliance termination. In the top panel we focus on material alliance termination, plotting symmetric results for the effect of moving from a dyad without shared ideology to one with shared ideology (top left) and the effect of moving from a dyad with shared ideology to one without it (top right). In the bottom panel we focus on rhetorical alliance termination. Estimates are exponentiated in the figure, so interpretation is straightforward. The marginal effect of shared ideology is the ratio of the instantaneous probability of alliance termination if a dyad shares ideology divided by the instantaneous probability of alliance termination if a dyad does not share ideology, for each value of repression.

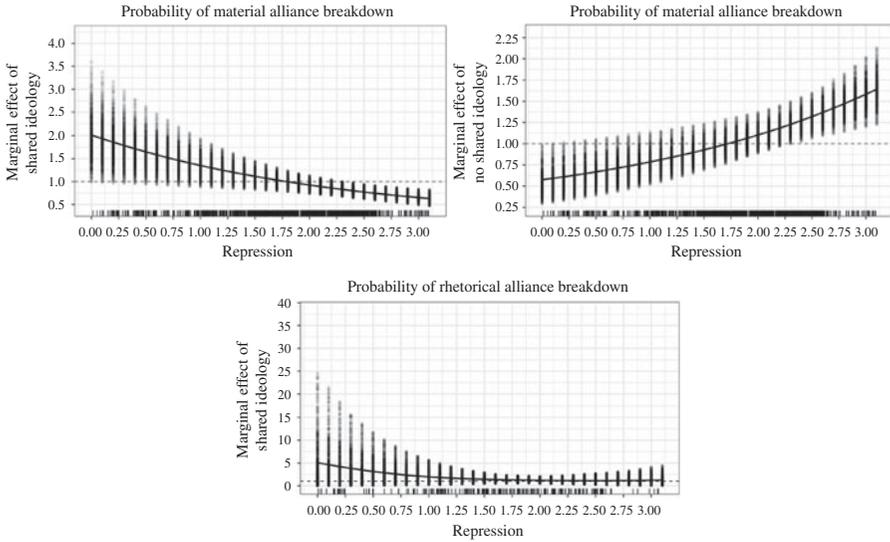
The results provide support for Hypothesis 2, particularly in the context of material alliances. In line with our expectation, shared ideology has no significant relationship with rhetorical or material alliance durability at low levels of repression. However, as repression increases, shared ideology has a significant negative relationship with the probability of material alliance termination. At the ninetieth percentile of repression, materially allied dyads that share an ideology are about 26 percent less likely to experience alliance termination than materially allied dyads without a shared ideology. Interestingly, rhetorical alliances show no such relationship. Results in the top-right panel also corroborate our motivating intuition about how repression

99. Gaibullov 2015; Hastings 2010.

100. Shapiro 2013.

101. Gandrud 2015. Appendix Table A.11.

inhibits cooperation. The probability of material alliance breakdown is about 63 percent greater for groups lacking shared ideology at the highest value of repression.



Notes: The bottom panel depicts the AME of shared ideology on the probability of rhetorical alliance termination. The top panel depicts the AME of shared ideology on the probability of material alliance termination. Bars are 90 percent confidence intervals. Rugs show the distribution of the repression variable. We plot repression over its 2nd to 98th percentiles. Exponentiated AMEs are calculated using Gandrud's *simPH* package based on 1,000 simulations. Confidence intervals are composed of visually weighted point estimates from each simulation.

FIGURE 5. Average marginal effect of shared ideology on material and rhetorical alliance termination

As a robustness check, we consider the effect of shared ideology and repression using a competing risks estimator.¹⁰² The event of interest, rhetorical or material alliance termination, is subject to competing risks like alliance upgrades (shifts from rhetorical to material cooperation) and downgrades (shifts from material to rhetorical cooperation). Results from these models confirm that material alliance termination is less likely for shared ideology dyads as repression increases. Parametric hazard models yield similar results.¹⁰³

Overall, these results show that the role of shared ideology in sustaining alliances under repression is distinct for rhetorical versus material alliances. Shared ideology is associated with higher material alliance durability when repression increases, while the effect of shared ideology on rhetorical alliance durability is negligible. This key difference between rhetorical and material alliances highlights the importance

102. Table A.12.

103. Figure A.13.

of our theoretical exercise in distinguishing them. More broadly, these findings suggest that different dynamics underpin the durability of material and rhetorical alliances.

Disaggregating Shared Ideology

The prior analyses assessed ideology broadly, pooling shared secular (i.e., nationalism/separatism, leftism/communism, right-wing, and environmentalism) and religious ideologies in a single indicator. There is, however, reason to anticipate heterogeneity among ideologies in their value for alliance commitment as repression grows. We specifically posit that shared religious ideology is an especially efficient mechanism for alliance commitment because religions offer large, dispersed networks of believers and authority figures who can monitor and sanction alliances between adherent groups. Similarly, religious ideologies offer cheap mechanisms for rewarding cooperation and punishing defection.¹⁰⁴ To examine heterogeneity across ideologies, we replicate our main analyses of alliance initiation and durability, replacing the general indicator for shared ideology with specific indicators for shared religion and shared leftism/communism. These ideologies comprise most of the alliances in the data, and over time, religion and leftism have provided the most substantial ideological capital for militant groups.¹⁰⁵

Our repression measure captures the overall climate in a country, but does not distinguish which groups are targeted. Because different ideologies may face different levels of repression at various points, we focus these disaggregated analyses on periods when the respective militant ideology was most salient, on the logic that these are times when state repression posed the greatest threat to cooperation. In the absence of granular data on which ideologies face the brunt of the repression, this periodization helps capture variation in the intensity of pressure on different ideological groups. We study shared religion during the post-9/11 period through 2016, when the Global War on Terror drove increasing pressure on jihadist groups; and shared leftism/communism during the Cold War, when US forces bolstered anti-communist forces around the world.

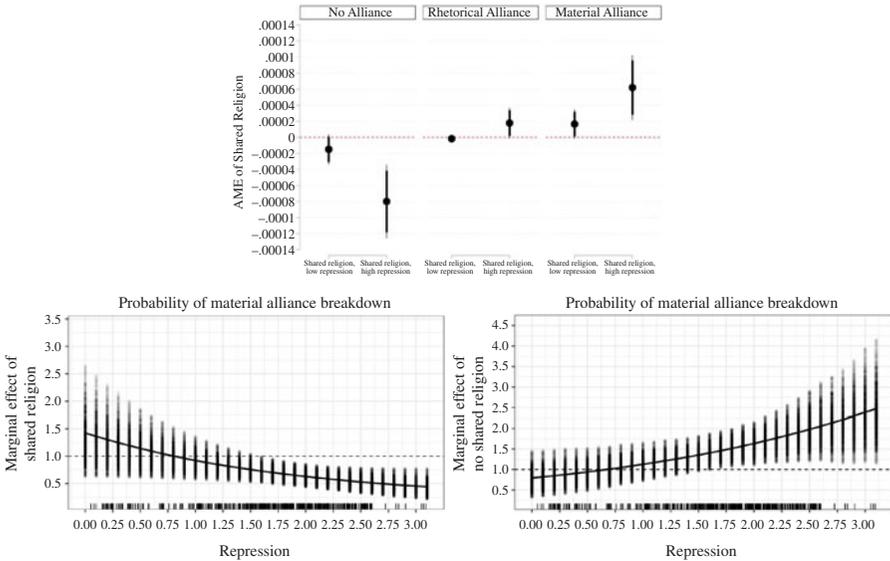
Shared Religion in the Post-2001 Era

Figure 6 tests our expectation that shared religion is uniquely important for generating alliance commitment. In the top panel we present results from a multinomial logit model of alliance initiation. In the bottom panel we depict the effect of shared

104. Walter 2017.

105. Appendix Figures A.18 through A.20 also study shared nationalism/separatism, right-wing, and environmentalist ideologies.

ideology on material alliance durability. Models follow the same specification employed earlier, though we subset to the post-2001 period, when state repression against religious (and especially jihadist) groups was most intense.¹⁰⁶



Notes: In the top panel, thick and thin bars are 90 percent and 95 percent confidence intervals, respectively. The dashed line marks 0. Low and high repression are the 10th and 90th values of the repression variable. In the bottom panel, rugs show the distribution of the repression variable. We plot repression over its 2nd to 98th percentiles. Exponentiated average marginal effects are calculated using Gandrud's *simPH* package based on 1,000 simulations. Confidence intervals are composed of visually weighted point estimates from each simulation.

FIGURE 6. *The effects of shared religion on alliance initiation and durability*

In the top panel, key differences emerge in the effect of shared religion compared to shared ideology in general. At low levels of repression, religion has no significant effect on the probability of rhetorical initiation ($p = .424$), but this effect becomes significantly positive as repression increases ($p = .069$). Shared religion increases the probability of material initiation at low levels of repression, but this effect is substantively modest and narrowly significant ($p = .076$). These findings are consistent with Bloom's conclusion that co-religionists are uniquely susceptible to outbidding dynamics, competing for recruits and resources when repression is low and clerics and adherents have reduced incentives to demand cooperation.¹⁰⁷ In contrast, and in line with Hypothesis 1, shared religion is associated with a significant increase in the probability of both rhetorical and material initiation as repression increases.

106. We omit controls for population, GDP per capita, and US troops, which contribute to data loss owing to missingness. Results are similar but somewhat less precisely estimated when we include these covariates. We report full coefficient estimates for Figure 5 in Appendix Table A.14.

107. Bloom 2005.

Moving from the tenth to the ninetieth percentile of repression increases the probability of rhetorical initiation 130 percent and the probability of material initiation 116 percent. In other words, repression has promoted cooperation between co-religionist militant groups in the post-2001 period. AQ's relationship with its network of Salafi affiliates is instructive of religion's unique commitment role for cooperation. As counterinsurgent pressure increased after 2001, AQ expanded its material relationships with ideologically sympathetic organizations around the world.

In the bottom panel of [Figure 6](#) we study the effect of shared religion on the durability of material cooperation.¹⁰⁸ Findings comport with Hypothesis 2. The results in the bottom-left panel show that, for groups that share a religious ideology, the risk of material alliance termination is positive and imprecisely estimated when repression is low, but the effect of shared religion strengthens considerably as repression increases.¹⁰⁹ Groups that share religion are about 55 percent less likely to suffer material termination at the highest level of repression. This finding comports with Woldemariam's argument that reduced repression attenuates incentives for cooperation and makes militant fragmentation more likely, but that repression can lead to insurgent cohesion if commitment is high.¹¹⁰ Equivalently, the results in the bottom-right panel show that the risk of material alliance breakdown is 150 percent greater for groups without shared religion at the highest level of repression. Overall, these findings help illustrate why global linkages between jihadist militant groups like AQ, ISIS, and their affiliates have endured despite two decades of massive counterterror pressure. Shared religion provides a particularly complete package of commitment devices that aid cooperation in the face of threat.

Although we focus on material alliances in [Figure 6](#), we find substantively identical results for rhetorical alliances.¹¹¹ Given the small number of co-religious rhetorical alliances in the post-2001 period, we hesitate to draw strong inferences about the relative importance of shared religion for generating commitment in rhetorical versus material alliances under repression. However, these results suggest that co-religious rhetorical alliances are significantly less likely to break down for all values of repression above the tenth percentile. This effect is largely driven by the network of rhetorical alliances ISIS built in 2015 and 2016 as a means of legitimizing its caliphal project.¹¹²

108. We focus on material alliances because there are few rhetorical alliances involving co-religious groups in the post-2001 era ($n = 285$ dyad-years).

109. The plot in the bottom-left panel of [Figure 6](#) shows that shared religion has no significant effect on alliance breakdown when repression ranges from its second to thirty-fifth percentiles, but significantly reduces the risk of material alliance termination at all values of repression above the thirty-fifth percentile. For values of repression below the second percentile, we observe only three outlier cases of material alliance termination between co-religious groups, and the level of repression in these cases is more than 3.6 standard deviations below the mean level of repression facing co-religious alliances in our data.

110. Woldemariam 2018.

111. [Figure A.15](#).

112. [Potter, Plapinger, and Blair 2020](#).

Shared Leftism/Communism in the Cold War

We posit that the effectiveness of religious ideology as a commitment device derives from its built-in institutions and monitoring mechanisms, rather than theology. As such, secular ideologies with substantial numbers of adherents and broad networks of institutions should follow a similar pattern. In the twentieth century, leftism/communism represented the most prominent secular ideology, with a global network of ideologues and substantial state support for adherent militants. The end of the Cold War may have weakened the commitment value of the ideology, as communism's transnational networks and primary state supporter evaporated.¹¹³ However, we expect, as with religion, that leftism/communism had a distinct positive effect on alliance commitment during the Cold War, when the ideology was a salient ideological force and anticommunist repression was intense. To investigate this possibility, we specify an additional model where we interact shared leftist ideology and repression, and subset to the Cold War era, defined as 1950 to 1989.¹¹⁴

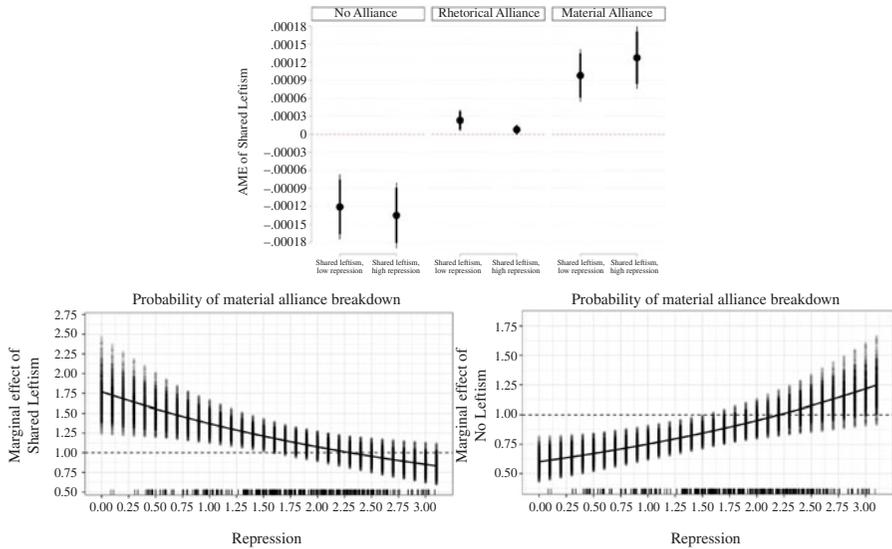
The top panel of [Figure 7](#), shows the effect of shared leftism on rhetorical and material alliance initiation at low and high values of repression. Increasing repression reduces the probability of rhetorical alliance initiation between groups sharing leftist ideology by 100 percent as repression increases from its tenth to ninetieth percentiles. This effect differs from the effect of shared religion on rhetorical alliance initiation, where we observe an increasing probability of initiation as repression increases. Like shared religion in the post-2001 period, however, shared leftist dyads are 26 percent more likely to ally materially as repression increases. This result aligns with our expectation in H1. More broadly, these findings highlight a key difference between rhetorical and material alliances in their responsiveness to repression, highlighting the importance of our exercise in distinguishing them.

Turning to the bottom panel of [Figure 7](#), results on material alliance durability also suggest that shared leftism during the Cold War plays a less important commitment role under repression than shared religion after 2001. Specifically, whereas we find that shared religion significantly reduces the probability of material alliance termination as repression increases, figures in the bottom panel suggest that shared leftism has a more modest effect. During the Cold War, shared leftism reduced the probability of material alliance termination as repression increased, but not significantly so. Rather, the graphs in the bottom panel show that the negative effect of shared leftism on alliance breakdown in the Cold War is mostly a product of the unique fractiousness of cooperation between leftist groups at low levels of repression. As Cronin argues, "The left-wing and anarchistic groups of the 1970s ... were notorious for their inability to articulate a clear vision of their goals that could be handed down to successive generations after the first generation of radical leaders departed or

113. Kalyvas and Balcells 2010.

114. We report full coefficient estimates for [Figure 7](#) in Appendix Table A.16.

were eliminated.”¹¹⁵ As a result, leftist militant organizations throughout the Cold War were prone to disputes over doctrine, particularly in periods when repression was low and allies had time and space to debate revolutionary theory.¹¹⁶ In total, shared leftism reduced the risk of material alliance breakdown during the Cold War, but not enough to generate significant alliance commitment. We find no evidence that shared leftism facilitated rhetorical alliance commitment.¹¹⁷



Notes: In the top panel, thick and thin bars are 90 percent and 95 percent confidence intervals, respectively. The dashed line marks 0. Low and high repression are the 10th and 90th values of the repression variable. In the bottom panel, rugs show the distribution of the repression variable. We plot repression over its 2nd to 98th percentiles. Exponentiated average marginal effects are calculated using Gandrud’s *simPH* package based on 1,000 simulations. Confidence intervals are composed of visually weighted point estimates from each simulation.

FIGURE 7. *The effects of shared leftism/communism on alliance initiation and durability*

Beyond shared religion and leftism, we analyze shared nationalism/separatism, right-wing, and environmentalist ideologies in the online appendix.¹¹⁸ We do not have strong a priori expectations about the relative commitment value of these secular ideologies, but we do anticipate that their roles in facilitating alliance initiation and durability under repression will be less important than shared religion. In contrast to shared religion, shared nationalism/separatism only marginally increases the probability of material alliance initiation, and this effect attenuates considerably

115. Cronin 2009, 97.

116. Karmon 2005.

117. Figure A.17.

118. Figures A.18 through A.20.

at high levels of repression. Similarly, compared to other ideologies, alliances between right-wing and environmentalist groups are less likely to be initiated, and more prone to be terminated, as repression increases. Overall, these findings point to the unique commitment value of shared religion for militant cooperation.

Robustness and Extensions

The chief threat to inference in our empirical framework stems from the endogeneity of state repression and militant cooperation. If governments increase repression because militant groups form material alliances, our results may capture the government response to militant cooperation, not the role of shared ideology as a commitment device. In our primary models, we use a one-year lag of repression to avoid temporal confounding, but this strategy is imperfect because governments may increase repression in expectation of militant cooperation.

This endogenous process argument cannot explain our finding that shared ideology reduces the probability of material alliance termination as repression increases. States have an unconditional incentive to respond to material cooperation between militant groups with repression. Hence, if reverse causality were solely driving our results—that is, if governments were increasing repression in response to militant cooperation or the threat thereof—we would not expect significant differences in the probability of termination between dyads with and without shared ideology.

To further address potential endogeneity between repression and cooperation in our models, we take two complementary approaches. First, we re-estimate our core specifications using a semi-parametric marginal structural model (MSM). The MSM is fitted in two stages. We estimate the probability that a group experiences its observed treatment history (in this case, we define treatment as high repression) in the first stage and use these estimates to construct inverse probability of treatment weights. Then we re-estimate the effect of shared ideology on alliance initiation and durability as repression increases those weights. In this way, inverse probability weighting controls for time-dependent confounding between repression and cooperation.¹¹⁹ In line with our main results, the MSM shows that shared ideology unconditionally increases the probability of alliance initiation and significantly reduces the risk of material, but not rhetorical, alliance termination under repression.¹²⁰

Second, we re-estimate our models using two-stage residual inclusion (2SRI). 2SRI is a control-function approach that addresses endogenous explanatory variables by estimating a reduced-form model of the endogenous variable (in our case, repression) and including first-stage residuals as regressors in the second stage. Because our measure of repression is continuous, we estimate the first-stage selection equation using linear regression with country-level covariates. In the second stage, we

119. Blackwell 2013.

120. Table A.21, Figure A.22.

re-estimate our multinomial logistic and hazard models while including the residual term calculated in the first stage. 2SRI estimates also confirm that shared ideology unconditionally increases the probability of alliance initiation and significantly reduces the risk of material but not rhetorical alliance termination.¹²¹ While neither 2SRI nor the MSM can fully mitigate endogeneity concerns, concordance between the estimates from these models and our core results builds confidence in our findings.

Next, we probe the sensitivity of our results to alternative estimation techniques. One of our primary modeling strategies is multinomial logistic regression, which does not assume proportional odds. Taking advantage of the ordered structure of our dependent variables, we show that ordered logit models yield substantively identical results.¹²² Second, while we control for dyadic and country-level covariates, it is likely that there remains unobserved heterogeneity across undirected dyads and years. Fixed effects could absorb time-invariant confounding, but they are too computationally intensive to implement in our primary models. Linear probability models estimated with high-dimensional fixed effects for undirected dyads and years indicate that increases in repression are associated with rhetorical alliance initiation for groups that share ideology.¹²³ The converse holds for groups that lack shared ideology.

Apart from alternative estimators, we re-examine the core results using different specifications, including alternative measures of cooperation and repression. First, we re-analyze our core models using the dependent variable based on relationship type, rather than on alliance content.¹²⁴ Second, we use a different measure of repression based on CIRI rather than Fariss.¹²⁵ Third, we re-estimate our models on a sample of observations for which both groups involved in a dyad appear in the GTD—these models drop observations with missingness in the capability ratio measure.¹²⁶ Fourth, because AQ and ISIS are uniquely well connected and capable, and have been the target of aggressive and sustained counterterrorism operations, we show that our results are robust to excluding dyads involving these groups or their core affiliates.¹²⁷

Finally, as an extension on our descriptive analyses, we examine heterogeneity in the value of shared ideology under repression for domestic versus transnational alliances.¹²⁸ Transnational militant networks, such as those of AQ and ISIS, represent perhaps the most prolific and dangerous form of militant cooperation.¹²⁹ However, the transaction costs of transnational alliances are far higher than those of domestic alliances, so commitment should be more difficult to form and sustain for groups

121. Table A.23, Figure A.24.

122. Table A.25.

123. Figure A.26.

124. Figures A.27 and A.28.

125. Table A.29, Figure A.30.

126. Table A.31, Figure A.32.

127. Figures A.33 and A.34.

128. Figure A.35.

129. Bacon 2018; Karmon 2005.

cooperating across a broad geographic area versus within a single conflict ecosystem.¹³⁰ Transnational alliances represent a hard test for the role of shared ideology in generating alliance commitment as repression increases.

To test for differences in the effect of shared ideology on alliance initiation and termination as repression increases, we rerun our core models on two distinct samples. The domestic sample includes all undirected dyad-years involving groups based in the same country or contiguous neighboring countries, and the transnational sample includes all observations involving groups based in noncontiguous neighboring countries. We find that the theorized effects are magnified in the expected direction for transnational material alliances, precisely where commitment is most challenging. As in [Table 2](#), shared ideology increases the probability of rhetorical and material alliance initiation, and this effect is generally unconditioned on repression. A similar pattern emerges in the context of alliance durability. Both domestic and transnational alliances are less likely to terminate when they share ideology, particularly religion, as repression increases, but the magnitude of this effect is significantly greater for transnational than for domestic alliances. The predicted breakdown-reducing effect of shared ideology is 35 percentage points greater for transnational than for domestic material alliances at the highest value of repression. Combined, these tests build additional support for our theory and show that the effect of shared ideology on alliance formation and durability is largest for transnational alliances, precisely those in which commitment problems are most severe.

Conclusion

Understanding how and why militant groups cooperate requires studying how they overcome commitment problems to initiate and sustain alliances in the face of repression. This is important because, as Bacon and Arsenault note, “groups with allies pose the greatest counterterrorism threat today and understanding what sustains or disrupts these relationships is thus of paramount importance.”¹³¹ We find that shared ideology is important for alliance initiation and vital to sustaining cooperation under repression. There are, however, important distinctions between religion and other ideologies, as well as between material and rhetorical cooperation.

Extending the growing literature on the importance of ideology in militant violence, we show that, particularly in the context of repression, shared ideology aids in the formation and maintenance of material alliances. Using an original, new data set on militant cooperation, we find that shared ideology is associated with a substantially higher probability that material cooperation is sustained as repression increases. When groups share ideology, reputational considerations and informal institutions enhance trust and facilitate monitoring and enforcement of cooperative bargains.

130. Gaibullov 2015; Hastings 2010.

131. Bacon and Arsenault 2019, 231.

More broadly, the reality that organizations cooperate frequently and in diverse ways suggests the importance of moving from conventional, monadic models of militancy to a dyadic view that recognizes the centrality of ties between militants.

Degrading cooperation between militants may be essential to reduce their capacity. But our findings suggest that increasing repression may not be the most effective way to disrupt cooperation, at least when groups share an ideology. Rather paradoxically, deterring and weakening cooperation between violent nonstate groups will often require governments to engage in nonviolent efforts to build ties with nonmilitant co-ideologues of militant groups.¹³² By building relationships with potential sympathizers and authority figures of the ideologies to which militant groups adhere, governments can attenuate the effectiveness of shared ideology as a commitment device in militant cooperation.

While our results highlight the particularly durable nature of networks that develop among religiously motivated organizations, we also find evidence that other ideologies offer network benefits as well. In particular, alliances between armed groups on the far left were especially durable during the Cold War, when such ideologies were popular and widely held, yielding a broad community to ease alliance concerns. Today, there is mounting evidence that far-right extremism is on the rise and that far-right militants are forging cross-national ties. Our results suggest that practitioners should not let the recent focus on jihadist threats blind them to budding networks that are linked to increasingly salient and globalized ideologies.

The evidence we present here underscores the need to distinguish between rhetorical and material alliances. While both are common, different dynamics govern how they are initiated and sustained. Future work should continue exploring variation in the causes and consequences of these different forms of militant cooperation. Finally, the expansive, time-series data on militant relationships that we introduce in this article open the door to a variety of research questions that were previously difficult to study. For example, other organizational attributes that facilitate trust might lead to cooperation in a manner similar to what we demonstrate here. Shared ethnicity and a common adversary are among the most obvious possibilities.

Data Availability Statement

Replication files for this article may be found at <<https://doi.org/10.7910/DVN/PHUSUM>>.

Supplementary Material

Supplementary material for this article is available at <<https://doi.org/10.1017/S0020818321000114>>.

132. Dugan and Chenoweth 2012.

References

- Abrahms, Max, and Philip B.K. Potter. 2015. Explaining Terrorism: Leadership Deficits and Militant Group Tactics. *International Organization* 69 (2):311–42.
- Analytical Support and Sanctions Monitoring Team. 2020. Eleventh Report of the Analytical Support and Sanctions Monitoring Team Submitted Pursuant to Resolution 2501 (2019) Concerning the Taliban and Other Associated Individuals and Entities Constituting a Threat to the Peace, Stability and Security of Afghanistan. United Nations Security Council.
- Asal, Victor, Mitchell Brown, and Angela Dalton. 2012. Why Split? Organizational Splits Among Ethnopolitical Organizations in the Middle East. *Journal of Conflict Resolution* 56 (1):94–117.
- Asal, Victor, Ken Cousins, and Kristian Skrede Gleditsch. 2015. Making Ends Meet: Combining Organizational Data in Contentious Politics. *Journal of Peace Research* 52 (1):134–38.
- Asal, Victor, Hyun Hee Park, R. Karl Rethemeyer, and Gary Ackerman. 2016. With Friends Like These ... Why Terrorist Organizations Ally. *International Public Management Journal* 19 (1):1–30.
- Asal, Victor, and R. Karl Rethemeyer. 2008. The Nature of the Beast: Organizational Structures and the Lethality of Terrorist Attacks. *Journal of Politics* 70 (2):437–49.
- Atran, Scott, Robert Axelrod, and Richard Davis. 2007. Sacred Barriers to Conflict Resolution. *Science* 317 (5841):1039–40.
- Bacon, Tricia. 2017. Hurdles to International Terrorist Alliances: Lessons from Al Qaeda's Experience. *Terrorism and Political Violence* 29 (1):79–101.
- Bacon, Tricia. 2018. *Why Terrorist Groups Form International Alliances*. University of Pennsylvania Press.
- Bacon, Tricia, and Elizabeth Grimm Arsenault. 2019. Al Qaeda and the Islamic State's Break: Strategic Strife or Lackluster Leadership? *Studies in Conflict and Terrorism* 42 (3):229–63.
- Bakke, Kristin M. 2014. Help Wanted? The Mixed Record of Foreign Fighters in Domestic Insurgencies. *International Security* 38 (4):150–87.
- Bapat, Navin A., and Kanisha D. Bond. 2012. Alliances Between Militant Groups. *British Journal of Political Science* 42 (4):793–824.
- Basedau, Matthias, Birte Pfeiffer, and Johannes Vüllers. 2016. Bad Religion? Religion, Collective Action, and the Onset of Armed Conflict in Developing Countries. *Journal of Conflict Resolution* 60 (2):226–55.
- Baylouny, Anne Marie, and Creighton A. Mullins. 2018. Cash Is King: Financial Sponsorship and Changing Priorities in the Syrian Civil War. *Studies in Conflict and Terrorism* 41 (12):990–1010.
- Blackwell, Matthew. 2013. A Framework for Dynamic Causal Inference in Political Science. *American Journal of Political Science* 57 (2):504–20.
- Blair, Christopher W., Michael C. Horowitz, and Philip B.K. Potter. Forthcoming. Leadership Targeting and Militant Alliance Breakdown. *Journal of Politics*.
- Bloom, Mia. 2005. *Dying to Kill: The Allure of Suicide Terror*. Columbia University Press.
- Box-Steffensmeier, Janet M., and Bradford S. Jones. 1997. Time Is of the Essence: Event History Models in Political Science. *American Journal of Political Science* 41 (4):1414–61.
- Bruce, Steve. 2007. *Paisley: Religion and Politics in Northern Ireland*. Oxford University Press.
- Byman, Daniel L. 2013. Outside Support for Insurgent Movements. *Studies in Conflict and Terrorism* 36 (12):981–1004.
- Byman, Daniel L. 2014. Buddies or Burdens? Understanding the al Qaeda Relationship with Its Affiliate Organizations. *Security Studies* 23 (3):431–70.
- Carter, David B. 2012. A Blessing or a Curse? State Support for Terrorist Groups. *International Organization* 66 (1):129–51.
- Christia, Fotini. 2012. *Alliance Formation in Civil Wars*. Cambridge University Press.
- CIRI Human Rights Dataset. 2014. David L. Cingranelli, David L. Richards, and K. Chad Clay, principal investigators. Dataset version 2014.04.14. <<http://www.humanrightsdata.com>>.
- Crenshaw, Martha. 2019. Mapping Militant Organizations. Stanford University. Available at <https://cisac.fsi.stanford.edu/research/mapping_militant_organizations>.

- Cronin, Audrey Kurth. 2009. *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*. Princeton University Press.
- Dugan, Laura, and Erica Chenoweth. 2012. Moving Beyond Deterrence: The Effectiveness of Raising the Expected Utility of Abstaining from Terrorism in Israel. *American Sociological Review* 77 (4):597–624.
- Eilstrup-Sangiovanni, Mette, and Calvert Jones. 2008. Assessing the Dangers of Illicit Networks: Why al-Qaida May Be Less Threatening Than Many Think. *International Security* 33 (2):7–44.
- Elorza, Antonio, José Mari Garmendia, Jáuregui Gurutz, and Florencio Dominguez Iribarren. 2006. *La historia de ETA*. Temas de Hoy.
- Enders, Walter, Todd Sandler, and Khusrav Gaibullov. 2011. Domestic Versus Transnational Terrorism: Data, Decomposition, and Dynamics. *Journal of Peace Research* 48 (3):319–37.
- Fariss, Christopher J. 2019. Yes, Human Rights Practices Are Improving over Time. *American Political Science Review* 113 (3):868–81.
- Freedman, Michael. 2019. Fighting from the Pulpit: Religious Leaders and Violent Conflict in Israel. *Journal of Conflict Resolution* 63 (10):2262–88.
- Gade, Emily Kalah, Michael Gabbay, Mohammed M. Hafez, and Zane Kelly. 2019. Networks of Cooperation: Rebel Alliances in Fragmented Civil Wars. *Journal of Conflict Resolution* 63 (9):2071–97.
- Gade, Emily Kalah, Mohammed M. Hafez, and Michael Gabbay. 2019. Fratricide in Rebel Movements: A Network Analysis of Syrian Militant Infighting. *Journal of Peace Research* 56 (3):321–35.
- Gaibullov, Khusrav. 2015. Terrorist Group Location Decision: An Empirical Investigation. *Oxford Economic Papers* 67 (1):21–41.
- Gaibullov, Khusrav, James A. Piazza, and Todd Sandler. 2017. Regime Types and Terrorism. *International Organization* 71 (3):491–522.
- Gandrud, Christopher. 2015. simPH: An R Package for Illustrating Estimates from Cox Proportional Hazard Models Including for Interactive and Nonlinear Effects. *Journal of Statistical Software* 65 (3): 1–20.
- Gnosis: Rivista Italiana di Intelligence. 2006. The Proletarian Armed Squads: Or Rather, Prison and Machine Guns. <<http://gnosis.aisi.gov.it/gnosis/Rivista7.nsf/ServNavigE/21>>.
- Government of the United States. 2003. National Strategy for Combating Terrorism. The White House. Available at <<https://2001-2009.state.gov/s/ct/rls/wh/71803.htm>>.
- Hastings, Justin V. 2010. *No Man's Land: Globalization, Territory, and Clandestine Groups in Southeast Asia*. Cornell University Press.
- Hegghammer, Thomas. 2020. *Abdallah Azzam and the Rise of Global Jihad*. Cambridge University Press.
- Hentz, James J., and Hussein Solomon, eds. 2017. *Understanding Boko Haram: Terrorism and Insurgency in Africa*. Routledge.
- Hoffman, Bruce, and Gordon H. McCormick. 2004. Terrorism, Signaling, and Suicide Attack. *Studies in Conflict and Terrorism* 27 (4):243–81.
- Horowitz, Michael C., Evan Perkoski, and Philip B.K. Potter. 2018. Tactical Diversity in Militant Violence. *International Organization* 72 (1):139–71.
- Horowitz, Michael C., and Philip B.K. Potter. 2014. Allying to Kill: Terrorist Intergroup Cooperation and the Consequences for Lethality. *Journal of Conflict Resolution* 58 (2):199–225.
- Hou, Dongfang, Khusrav Gaibullov, and Todd Sandler. 2020. Introducing Extended Data on Terrorist Groups (EDTG), 1970 to 2016. *Journal of Conflict Resolution* 64 (1):199–225.
- Kalyvas, Stathis N., and Laia Balcells. 2010. International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict. *American Political Science Review* 104 (3):415–29.
- Kane, Tim. 2016. The Decline of American Engagement: Patterns in US Troop Deployments. Economics Working Paper 16101. Hoover Institution.
- Karmon, Ely. 2005. *Coalitions Between Terrorist Organizations: Revolutionaries, Nationalists and Islamists*. Martinus Nijhoff.
- Keels, Eric, and Krista Wiegand. 2020. Mutually Assured Distrust: Ideology and Commitment Problems in Civil Wars. *Journal of Conflict Resolution* 64 (10):2022–48.
- Marcus, Aliza. 2007. *Blood and Belief: The PKK and the Kurdish Fight for Independence*. New York University Press.

- Maynard, Jonathan Leader. 2019. Ideology and Armed Conflict. *Journal of Peace Research* 56 (5):635–83.
- McLaughlin, Theodore, and Wendy Pearlman. 2012. Out-Group Conflict, In-Group Unity? Exploring the Effect of Repression on Intramovement Cooperation. *Journal of Conflict Resolution* 56 (1):41–66.
- Mir, Asfandyar. 2018. What Explains Counterterrorism Effectiveness? Evidence from the US Drone War in Pakistan. *International Security* 43 (2):45–83.
- Moghadam, Assaf. 2017. *Nexus of Global Jihad: Understanding Cooperation Among Terrorist Actors*. Columbia University Press.
- National Consortium for the Study of Terrorism and Responses to Terrorism (START). 2019. Global Terrorism Database.
- National Memorial Institute for the Prevention of Terrorism. 2006. Terrorism Knowledge Base.
- Office of the Director of National Intelligence. 2011. Gist of Conversation, 11 October <<https://www.dni.gov/files/documents/ubl/english/Gist%20of%20conversation%20Oct%2011.pdf>>.
- Parkinson, Sarah E. 2021. Practical Ideology in Militant Organizations. *World Politics* 73 (1):52–81.
- Pedahzur, Ami, and Arie Perliger. 2006. The Changing Nature of Suicide Attacks: A Social Network Perspective. *Social Forces* 84 (4):1987–2008.
- Perkoski, Evan. 2019. Internal Politics and the Fragmentation of Armed Groups. *International Studies Quarterly* 63 (4):876–89.
- Pettersson, Therése, and Magnus Öberg. 2020. Organized Violence, 1989–2019. *Journal of Peace Research* 57 (4):597–613.
- Phillips, Brian J. 2014. Terrorist Group Cooperation and Longevity. *International Studies Quarterly* 58 (2): 336–47.
- Phillips, Brian J. 2019. Do 90 Percent of Terrorist Groups Last Less Than a Year? Updating the Conventional Wisdom. *Terrorism and Political Violence* 31 (6):1255–65.
- Piazza, James A. 2018. Transnational Ethnic Diasporas and the Survival of Terrorist Organizations. *Security Studies* 27 (4):607–32.
- Popovic, Milos. 2018. Inter-Rebel Alliances in the Shadow of Foreign Sponsors. *International Interactions* 44 (4):749–76.
- Potter, Philip B.K., Samuel Plapinger, and Christopher W. Blair. 2020. The Puzzle of Large Alliance Networks. Unpublished article, University of Virginia.
- Price, Bryan C. 2018. *Targeting Top Terrorists: Understanding Leadership Removal in Counterterrorism Strategy*. Columbia University Press.
- Rapoport, David C. 2004. The Four Waves of Modern Terrorism. In *Attacking Terrorism: Elements of a Grand Strategy*, edited by Audrey Kurth Cronin and James Ludes, 46–73. Georgetown University Press.
- Sandler, Todd. 2005. Collective Versus Unilateral Responses to Terrorism. *Public Choice* 124 (1–2): 75–93.
- Sanín, Francisco Gutiérrez, and Elisabeth Jean Wood. 2014. Ideology in Civil War: Instrumental Adoption and Beyond. *Journal of Peace Research* 51 (2):213–26.
- Shapiro, Jacob N. 2013. *The Terrorist's Dilemma: Managing Violent Covert Organizations*. Princeton University Press.
- Terrorism and Security: The Italian Experience. 1984. Report of the Subcommittee on Security and Terrorism of the Committee on the Judiciary, United States Senate.
- Walter, Barbara F. 2017. The Extremist's Advantage in Civil Wars. *International Security* 42 (2):7–39.
- Webber, David, Arie Kruglanski, Erica Molinaro, and Katarzyna Jasko. 2020. Ideologies that Justify Political Violence. *Current Opinion in Behavioral Sciences* 34:107–11.
- Weinstein, Jeremy M. 2007. *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge University Press.
- Wilkenfeld, Jonathan, Victor Asal, and Amy Pate. 2011. Minorities at Risk Organizational Behavior (MAROB) Middle East, 1980–2004.
- Woldemariam, Michael. 2018. *Insurgent Fragmentation in the Horn of Africa: Rebellion and Its Discontents*. Cambridge University Press.
- Yilmaz, Kamil. 2014. *Disengaging from Terrorism: Lessons from the Turkish Penitents*. Routledge.

Zech, Steven T., and Michael Gabbay. 2016. Social Network Analysis in the Study of Terrorism and Insurgency: From Organization to Politics. *International Studies Review* 18 (2):214–43.

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