



# Tyrants and Terrorism: Why Some Autocrats are Terrorized While Others are Not<sup>1</sup>

COURTENAY R. CONRAD  
*University of California, Merced*

JUSTIN CONRAD  
*University of North Carolina at Charlotte*

AND

JOSEPH K. YOUNG  
*American University*

Conventional wisdom suggests that reports of terrorism should be sparse in dictatorships, both because such violence is unlikely to result in policy change and because it is difficult to get reliable information on attacks. Yet, there is variance in the number of terrorist attacks reported in autocracies. Why? We argue that differences in the audience costs produced by dictatorships explain why some nondemocracies experience more terrorism than others. Terrorists are more likely to expect a response in dictatorships that generate high domestic audience costs. Using data from multiple terrorism databases, we find empirical evidence that dictatorships generating higher audience costs—military dictatorships, single-party dictatorships, and dynastic monarchies—experience as much terrorism as democracies, while autocracies generating lower audience costs—personalist dictatorships and non-dynastic monarchies—face fewer attacks than their democratic counterparts.

Conventional wisdom suggests that reports of terrorism should be sparse in dictatorships, both because such violence is unlikely to result in policy change (for example, Eubank and Weinberg 1994; Pape 2003; Kydd and Walter 2006) and because it is difficult to get reliable information on attacks in nondemocratic states (for example, Eubank and Weinberg 1994; Drakos and Gofas 2006a,b; Abrahms 2007).<sup>2</sup> For many dictatorships, this conventional wisdom holds true: Jordan and North Korea, for example, have experienced few terrorist attacks in the last 30 years.<sup>3</sup> But terrorists do sometimes target dictatorships. For example, although Burma has been ruled by a military junta for decades, the country has faced as many as 30 terrorist attacks in a single year. Iran experiences almost as many attacks in a given year as the most targeted democracies. In 1981 alone, Iran experienced 108 terrorist attacks. Of these attacks, 51 were fatal and resulted in more than 200 deaths.<sup>4</sup> Why do some autocracies experience terrorism, while others do not?

One of the most robust findings in the empirical literature on terrorism is that democracies experience more terrorist attacks than nondemocracies (for example, Eubank and Weinberg 1994, 2001; Weinberg and Eubank 1998; Pape 2003; Braithwaite and Li 2007; Lai 2007; Piazza 2008).<sup>5</sup> Although democracies tend to experience more attacks than nondemocracies, democratic institutions may have competing effects on the incidence of terror (Li 2005); heterogeneous institutional arrangements influence the extent to which democracies generate more or less terrorist attacks (Findley and Young 2011). Disaggregating the institutions of democracy suggests that democratic participation reduces the likelihood that individuals resort to terrorism when challenging the state (Li 2005), while democratic constraints or multiple veto players encourage the use of terrorism by dissidents (Li 2005; Young and Dugan 2011).<sup>6</sup> But because the majority of work on terrorism focuses on the distinction between democracies and dictatorships and on disaggregating democracy, we cannot yet explain variance in attacks within dictatorships.<sup>7</sup>

Although the majority of explanations of terrorism focus on institutional variation in democracies, a growing literature in comparative politics argues that dictatorships also vary in their institutional design in ways that matter

<sup>1</sup> *Authors' notes:* Data and replication files will be made available on the authors' Web sites upon publication. A previous version of this paper was presented at the 2012 Annual Meeting of the International Studies Association. We are grateful to Max Abrahms, Doug Gibler, the editors at ISQ, and the anonymous reviewers for helpful comments and suggestions.

<sup>2</sup> We define a dictatorship as a regime in which the leader cannot be removed from power through a popular vote (Alvarez, Cheibub, Limongi, and Przeworski 1996; Cheibub, Gandhi, and Vreeland 2010). We use the terms dictatorship and autocracy interchangeably.

<sup>3</sup> Based on Global Terrorism Database (GTD) counts, Jordan averaged a little more than two attacks during the years from 1970 to 2007. North Korea only had a single attack over the same time period (START 2011).

<sup>4</sup> These figures come from START (2011). In 1994, another peak year, Iran experienced 43 attacks (START 2011).

<sup>5</sup> For alternate findings, see Drakos and Gofas (2006a) and Wade and Reiter (2007).

<sup>6</sup> The process of democratization might also encourage terrorist violence (Eyerman 1998).

<sup>7</sup> The only work to our knowledge that directly addresses variation in terrorism across dictatorships are a recent article by Young and Dugan (2011), a piece by Aksoy, Carter, and Wright (2012), and a forthcoming paper by Piazza and Wilson (2013).

for political outcomes (for example, Geddes 2005; Gandhi 2008; Weeks 2008). For example, dictatorial institutions have been found to affect state repression and international treaty commitment (Vreeland 2008; Powell and Staton 2009), autocratic political survival (Gandhi and Przeworski 2007), the ability to credibly signal foreign policy intentions (Weeks 2008), and the encouragement of foreign investment (Wright 2008). In this paper, we follow Weeks (2008), who argues that dictatorships vary in the extent to which their domestic institutional structures generate audience costs. Although audience cost arguments have been influential in explaining international processes, such as war (for example, Fearon 1994), military crises (for example, Smith 1998; Schultz 2001) and international cooperation (for example, Gaubatz 1996; Smith 1996; Leeds 1999; McGillivray and Smith 2000; Weeks 2008), this logic has not been extended to internal conflict dynamics. Importantly, however, the extent to which dictatorships vary in their generation of audience costs affects the incidence of domestic and international terrorist attacks.

We argue that potential terrorists are more likely to engage in violence against states that generate high levels of audience costs. Based on this logic, we provide a straightforward explanation for why democracies experience more terrorism than dictatorships: democracies generate higher audience costs than their dictatorial counterparts. Because domestic institutions also affect the extent to which dictatorships generate audience costs (Weeks 2008), however, focusing on audience costs also allows us to explain variance in terrorism among nondemocracies. We argue that dictatorships with institutions that create more audience costs should experience more terrorism than their counterparts that generate fewer audience costs. Specifically, we hypothesize that dictatorships generating higher audience costs—military dictatorships, single-party dictatorships, and dynastic monarchies—experience as much terrorism as democracies, while autocracies generating lower audience costs—personalist dictatorships and non-dynastic monarchies—face fewer attacks than their democratic counterparts. We test our hypotheses using a series of negative binomial models and find support for the argument that dictatorships generating higher audience costs experience more terrorist attacks than regimes where audience costs are low.

The remainder of this study proceeds as follows. In the following section, we review the goals and motivations of terrorism as a tactic of dissent, focusing specifically on how the perceived costs and benefits of terrorist attacks vary across institutional contexts. Next, we discuss audience costs generally and present our theory about how the generation of audience costs affects the incidence of terrorism, both across regime type and within dictatorships. We then test our hypotheses and discuss the implications of our results. We conclude by suggesting ways to extend our approach to other domestic conflict processes.

### **Terrorism: Motivations and Goals**

Why do individuals and groups resort to terrorist attacks? We define terrorism as “premeditated, politically motivated violence against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience” (United States Code, title 22, chapter 38, sec. 2656f[d]). This definition excludes acts by states or state terrorism. Although they are often

described in the media as irrational, we assume terrorists are rational actors who act purposively in pursuit of their policy preferences (Lake 2002; Enders and Sandler 2006; Findley and Young 2011).<sup>8</sup> At a minimum, then, potential terrorists commonly have policy preferences that are divergent from those of the target government. In many societies, terrorists have extreme preferences that are also markedly different from those of the general population (Lake 2002). As a result, neither institutional channels nor the possibility of popular dissent provide a venue by which terrorists can realistically change government policy.

Because there are important differences between holding radical views and acting on those beliefs (Horgan 2008), extremist views on their own are not sufficient to generate terrorism. Potential terrorists often turn to terrorism (instead of more direct attacks on the government) because they are weak in comparison with states (Lake 2002): terrorist cells are generally small and decentralized, and they do not have the manpower or the resources to match the might of the government (Frieden, Lake, and Schultz 2010: 384). Because states are rarely willing to concede to terrorists and engagement with the military would result in certain defeat (Frieden et al. 2010: 386), terrorists encourage political change by targeting the civilian population with violence. The goals of this violence are at least twofold: to pressure the government, via the populace, for policy change (Kydd and Walter 2006) and to provoke the government to respond militarily to incite moderates (Bueno de Mesquita and Dickson 2007), oftentimes to undermine an already fragile peace between the state and other actors (Kydd and Walter 2002).<sup>9</sup>

The potential benefits of terrorism are obvious: it has the potential to encourage change in government policy that cannot be achieved via domestic institutional channels, popular dissent, or direct negotiations with states. But even successful terrorist attacks are costly for operatives to plan and undertake. For example, the 9/11 attacks on New York City and Washington, DC took years to organize and implement, cost Al Qaeda more than \$500,000, and led to the loss of dozens of well-trained operatives (Commission 2004). The US and global response to the attack was even more costly for Al Qaeda, leading to the indefinite detention or death of individuals associated with the organization and an invasion of Afghanistan. Because its costs are high and its benefits probabilistic, dissidents are more likely to engage in terrorist activity when they believe their actions are likely to have an effect on changing the policies of the target government.

Although the motivations and costs of terrorist attacks may be common across states, there is variance in the extent to which terrorism is likely to be useful in enacting policy change in the target state. While it is not framed

<sup>8</sup> Abrahms (2008, 2011) has issued a strong critique of this framework, especially as it relates to the success or failure of terrorism. Because our argument generates predictions about the frequency of terrorism rather than the likelihood of its success, we are able to somewhat sidestep this argument. If “rational” implies success, then Abrahms (2008, 2011) may be accurate that rational dissidents should choose some other form of contention. This critique, however, does not necessarily imply that dissidents will completely avoid terror. Additionally, terrorism may be a last ditch effort of dissidents that have already failed in other ways to influence government policy (Bloom 2005).

<sup>9</sup> Kydd and Walter (2006) also suggest that terrorism can be a strategy of attrition, a way to outbid the group’s rivals, and a tool for intimidating the populace.

as such, the majority of scholarship to date focuses on differences in the incidence of terrorism based on the extent to which it generates costs vis-a-vis the domestic populace. One of the most robust findings in the empirical literature on terrorism—that democracies experience more terrorist attacks than nondemocracies (for example, Eubank and Weinberg 1994, 2001; Weinberg and Eubank 1998; Pape 2003; Braithwaite and Li 2007; Lai 2007; Piazza 2008)—can easily be recast as an argument about audience costs.<sup>10</sup>

There are two mechanisms by which these costs could lead to incentives for dissidents to use terrorism against a state.<sup>11</sup> First, regimes that are more accountable or responsive to domestic pressures for policy change may be more susceptible to terrorism as a coercive tool to change government policy. Terrorism intended to pressure the government into changing policies is more often directed at democracies, where audience costs are relatively high and terrorism-weary voters can make their preferences for policy change known at the polls (Pape 2003). Thus, although voters may not share the policy preferences of terrorist groups, these attacks can lead to changes in government policy consistent with terrorist goals. For example, one of the stated goals of Al Qaeda prior to the 2001 attacks was removal of US troops from Saudi Arabia. US troops were nearly all removed by 2003. Similarly, the United States removed Marines in 1983 from a mission in Lebanon following the suicide bombing of the barracks, a stated goal of some of the Shia-dominated militant groups. Additionally, recent cross-national empirical work suggests that terrorism can increase the likelihood of government failure in parliamentary regimes to a greater extent than even economic factors (Gassebner, Jong-A-Pin, and Mierau 2011).

The second mechanism linking audience costs to an increased likelihood of terrorism is driven by the ability to generate domestic audience costs within a particular group, rather than the general electorate. Although some terrorist strategies are intended to incite fringe elements of the populace, others focus on generating support for the cause among moderates. Terrorist strategies that aim to provoke the government into a response to alienate moderates are most likely where the moderates share some similar characteristic with the extremists (for example, religion, ethnicity, language) that in turn differs from the group that controls the state (Goodwin 2006). In Northern Ireland, for example, a key tactic of the Irish Republican Army (IRA) during the Troubles was to provoke a British response against Catholic moderates. Similar strategies were used by dissidents in Algeria in their battle for independence from France, Palestinian terrorist organizations in their quest for a state separate from Israel, and by ETA in Spain. Such tactics are intended to generate a disproportionate government response to mobilize support among sympathetic moderates.

Following these two potential pathways, a mobilization or policy change goal, we expect terrorism to be more frequent when domestic political institutions are present that generate high audience costs. Because the voluminous literature on audience costs (for example, Fearon 1994; Partell and Palmer 1999; Slantchev 2006; Weeks

2008) focuses primarily on differences between democracies and nondemocracies, however, recent work on terrorism has failed to address the influence of heterogeneous audience costs on attacks within dictatorships. In what follows, we discuss differences in audience costs across regime types generally (Fearon 1994) and within nondemocracies specifically (Weeks 2008). We then present a theory about how domestic audience costs encourage terrorist violence and lead to an increased incidence of terrorist attacks.

### Audience Costs as Incentives for Terrorism

Because they typically lack the capabilities to engage in military action against the state, terrorists direct violence against noncombatants or symbolic targets. Using attacks to generate fear in a broad audience is a proximate strategy by which terrorists seek to achieve policy change and influence government behavior (Hoffman 2006). Thus, the success of terrorism relies on the terrorists' ability to impact an audience beyond the immediate victims of an attack. That impact, however, is only useful if it can somehow be translated into policy or political change. As a result, terrorists should expect a higher utility from attacking states where leaders are more accountable to their populace, and consequently, more likely to either respond belligerently to attacks (inciting potentially sympathetic moderates to support the group) or to make policy concessions in direct response to terrorist violence. In this section, we discuss differences in audience costs across the typical regime dichotomy and within dictatorships, specifically, to generate predictions about the likelihood of terrorist violence.

#### *Audience Costs in Democracies and Dictatorships*

Domestic political institutions affect the extent to which leaders are accountable to their populace (Bueno de Mesquita, Smith, Siverson, and Morrow 2003). We argue that cross-national variance in domestic institutions that generate audience costs is central to understanding why some states are targeted more often by terrorists than other states. States encounter higher audience costs when they face a domestic populace that can mobilize to hold the leader accountable. In democracies, this often occurs through elections. Audience costs have been used to explain many outcomes in international relations, including military crises (Smith 1998; Schultz 2001) and international cooperation (Gaubatz 1996; Smith 1996; Leeds 1999; McGillivray and Smith 2000; Weeks 2008). To date, however, the majority of work on audience costs has focused on their effect on state behavior: How do state leaders make decisions knowing that they face domestic punishment for failures in leadership? For most existing studies, this has meant that democracies are expected to behave differently than nondemocracies. Scholars have argued that because of an environment of higher accountability, democratic leaders are generally more risk averse in foreign policy than their autocratic counterparts (Bueno de Mesquita, Morrow, Siverson, and Smith 1999; Huth and Allee 2002; Bueno de Mesquita et al. 2003). This risk-averse behavior is a direct result of the higher rate at which democracies generate audience costs, and it suggests that states which generate high audience costs should be more likely to make policy changes in response to shifting public opinion.

<sup>10</sup> Following Weeks (2008: 35), we define audience costs as "the domestic punishment that leaders would incur for backing down from public threats." See also Fearon (1994).

<sup>11</sup> While these are distinct pathways, they offer the same observable implications.

According to this logic, democracies should be more likely to respond to terrorist attacks than nondemocracies for two reasons. First, following a terrorist attack, citizens are more likely to pressure their governments for policy change if they believe leaders are likely to respond to their demands.<sup>12</sup> Related, the increased ability of citizens to “throw the bums out” in democracies causes leaders to be more responsive to shifts in public opinion that can occur following an extreme event like a terrorist attack. Spain after the Madrid bombings in 2004 provides a dramatic example. Attacks on the Madrid subway directly contributed to the defeat of Prime Minister Jose Maria Aznar and his party at the polls (Ordeix I Rigo 2005). Further, one of the first orders of business of the country’s newly elected leadership was the removal of Spanish troops from Iraq, a specific demand issued by terrorists involved in the bombing.<sup>13</sup> Second, as both Lake (2002) and Kydd and Walter (2006) argue, terrorist groups may deliberately target states in an attempt to illicit a disproportionate response and radicalize the fence-sitting moderates to their side. In sum, it is the reliability of some response from democracies that provides incentives for terrorist groups to attack these states.

States that generate high audience costs, like democracies, are more attractive venues for terrorists to launch their attacks.<sup>14</sup> The Spanish example points to a democracy that was a target of terrorism, something that would be expected given the dichotomous democracy–dictatorship approach in the existing literature. But this dichotomy struggles to explain why Burma, which has been ruled by a military junta for decades, has also experienced high levels of terrorism. At its peak, Burma has experienced more than 30 attacks in a single year. The dichotomous audience cost approach to generating predictions about which states should experience more attacks also fails to explain why Libya, under the personalist dictator Mohammar Qaddafi, experienced far fewer attacks than Burma, a military-led dictatorship. Both states have a long history of conflict, they are both located in regions that have experienced instability, and both have been dictatorships for decades. Yet, the difference in their experience with terrorism has been stark. Likewise, such an approach fails to explain the wide variance in attacks across North Korea, which experiences few attacks in any given year, and Iran, which experiences

as many attacks as the most volatile democracies. Related, if the difference in attacks between democracies and dictatorships was simply a function of reporting bias, there should be no difference in attacks across such restricted polities. In the next section, we describe why audience costs are likely to vary widely within the subset of nondemocracies, as well as why the audience cost approach provides substantial leverage that will allow us to explain why some states are targeted more often by terrorist attacks.

#### *All Autocrats are Not Created Equal*

As discussed above, the majority of studies investigating how domestic institutions influence terrorism focus on the distinction between democracies and nondemocracies (for example, Eubank and Weinberg 1994). Only recently have scholars acknowledged that all autocracies are not institutionally similar (for example, Geddes 2003; Gandhi and Przeworski 2006, 2007; Gandhi 2008; Weeks 2008; Svobik 2009). Likewise, terrorism scholars have only recently begun to recognize that different institutional arrangements among nondemocracies may lead to different experiences with terrorism.<sup>15</sup>

In order to explain differences in the incidence of terrorism in nondemocracies, we turn to heterogeneity in the extent to which a regime has a domestic institutional structure that can generate audience costs.<sup>16</sup> Weeks (2008) distinguishes among ten distinct regime types, eight of which can be considered nondemocracies. Based on this classification, she develops expectations about the level of audience costs that should be generated by the institutions embodied in each regime type. These expectations are based on three criteria. First, the generation of audience costs requires that a domestic political audience has the means and incentives to coordinate to punish the leader. Second, domestic actors must view backing down after having made a threat as worse than conceding

<sup>12</sup> As Tomz (2007) notes, these audience costs do not have to lead to the removal of a leader to be real. Any loss in domestic support caused by a leader of a state not following through on a public commitment is considered an audience cost. As these real losses in support translate to a decline in the ability of the leaders of a state to enact policy and govern, we would expect an increase in the likelihood that the leader is removed.

<sup>13</sup> The issue of the causes of the electoral defeat for the ruling party, Partido Popular, is complex and multi-causal, but both support for the Iraq War and the bombings likely played a role (Ordeix I Rigo 2005).

<sup>14</sup> We argue that terrorism is used against higher audience cost states with the intention of influencing policy. Berrebi and Klor (2006, 2008) argue that left wing governments are more attractive targets for terrorist attacks, causing voters to adjust their policy preferences toward right-wing governments. However, there are several reasons why we do not think endogeneity undermines our ability to draw inferences about the effect of audience costs on terrorist attacks. First, political ideology and institutional change—as measured by audience costs—are very different concepts. A terrorist attack might cause a government to change policies either under their own accord or because of domestic pressure from citizens, but we do not expect states to change from one political regime type to another in response to an attack. Second, if terrorist attacks did affect audience costs, we might also expect terrorist attacks would lead to regimes with lower audience costs; efforts to stop terrorism are more likely to involve a consolidation of power on the part of the executive than an opening of the political space.

<sup>15</sup> Building on arguments concerning authoritarian institutions, Aksoy et al. (2012) argue that opposition parties in dictatorships can mobilize dissent. The incorporation of these parties into a formal legislature can then channel dissent toward nonviolence. As a result, dictatorships with opposition parties and legislatures should see the emergence of fewer terrorist groups than dictatorships that allow party politics but do not provide a formal process for expressing grievances. There are two important differences between our studies. First, Aksoy et al. (2012) are primarily concerned with terrorist group emergence while we are attempting to explain the frequency of attacks. Second, an audience cost explanation builds on work from international processes and thus should apply to both domestic and transnational sources of terrorism, whereas the institutional dictatorial arguments primarily relate to domestic grievances and thus should be most applicable to domestic terrorism. Arguments that differentiate the causal process involved in each suggest that transnational terrorism may occur as conflict spills across borders, while country-specific goals, such as separatism, may drive domestic terrorism (Enders, Sandler and Gaibullov 2011). These types of terrorism may elicit different economic impacts (Gaibullov and Sandler 2008) or follow different logics (Young and Findley 2011), but the issue is far from settled. Recent studies that differentiate the kind of attacks (Enders et al. 2011; Young and Dugan 2011) do find differences between the two in certain applications. With that said, we assert that audience costs likely apply in both domestic and transnational terrorism. Since terrorism is often perpetrated to elicit a response from the state (Kydd and Walter 2006), it may not matter whether the attacks are perpetrated by a national of the country or a foreigner. To explore this, we separate ITERATE from a version of the GTD purged of transnational attacks (Enders et al. 2011).

<sup>16</sup> Our theory about the effect of audience costs on the incidence of terrorist attacks is also different from Li (2005), who addresses the effect of formal, institutionalized checks on executive authority on terrorism. Our theoretical argument—and the Weeks (2008) typology of regime types—focuses primarily on the ease with which an executive can be removed from office as the mechanism for driving terrorist attacks in nondemocracies.

without having made a threat in the first place. Third, outsiders must be able to observe the possibility of domestic sanctions for backing down. As Weeks (2008) points out, the institutions in nondemocratic states vary greatly with respect to these three criteria, and therefore, in their ability to generate audience costs.

It is important to note that Weeks' (2008) understanding of audience costs, as well as the early literature on audience costs, was specifically developed within the framework of interstate conflict.<sup>17</sup> But the logic is nevertheless useful in understanding the incentives for non-state actors to target governments. Of Weeks' (2008) three criteria, two are especially applicable to understanding terrorist incentives to target governments: a domestic audience that can punish a leader and the visibility of this process to larger audiences. These mechanisms increase terrorist incentives to attack the state in at least two ways. First, a leader who faces the threat of punishment or removal from office may be more likely to enact policy changes preferred by the terrorists in an effort to reduce the risk of future attacks. Leaders facing increased audience costs are more pressured to respond to attacks than their counterparts who do not face censure by domestic constituents.<sup>18</sup> Second, the wider observability of terrorist actions in states with high audience costs offers terrorists more bang-for-their-buck in terms of publicity and advertisement for their cause. Terrorists do not want their attacks and the consequent public outcry to go unnoticed and/or unreported. Thus, there is an incentive to engage in terrorism in states that generate higher levels of audience costs. In these states, the attacks—and the responses to those attacks—are more observable.

Building on a previous classification scheme developed by Geddes (2003), Weeks (2008) notes that both single-party dictatorships and military regimes maintain hierarchical structures in which elites are not personally tied to the leader of a state and can mobilize to remove the leader from power. Furthermore, when these regimes are stable, foreigners are able to observe changes within the leadership structure (Weeks 2008:46). Thus, she argues that single-party regimes and military regimes have the ability to generate audience costs similar to those in democracies, albeit through very different institutional mechanisms. Personalist dictatorships, on the other hand, create an environment in which it is difficult for elites to credibly threaten a leader with removal. Since the careers of elites in personalist dictatorships are often tied directly to the fortunes of the leader, and since power is highly concentrated in an individual leader, the likelihood of credible threats emerging from within the ranks of the elite is much smaller compared to single-party or military states. To these classifications, Weeks (2008) adds two distinct categories of monarchies:

<sup>17</sup> The original bargaining model that sparked this literature (1994) the original bargaining model that sparked this literature assumed a crisis between two states where fighting was costly but still possible due to imperfect information. While we apply the model to a contest between a state and violent group, we think many portions of the model hold. Similarly, states and terrorist groups need to provide costly signals so that threats between them are credible.

<sup>18</sup> As Lake (2002) and Kydd and Walter (2006) argue, terrorist groups may deliberately target more belligerent states in an attempt to illicit a disproportionate response from that state and thus potentially radicalize the fence-sitting moderates to their side. Contra to Fearon's (1994) expectation for why these states are poor targets for other states, it is the reliability of this violent response that provides incentives for terrorist groups to attack these states.

dynastic and non-dynastic. Because dynastic monarchies are built upon the rule of an entire family, they typically feature mechanisms by which family members progress up the ranks according to seniority (Weeks 2008:48). This hierarchical structure can be likened to a single-party or military regime: There are credible ways for family members to threaten the removal of a leader in a dynastic monarchy. By contrast, non-dynastic monarchies operate through the consolidation of power in a single individual and closely resemble the power distribution in personalist dictatorships.<sup>19</sup>

Taken together, these expectations about how audience costs vary across regime types have important implications for how leaders will respond to terrorist attacks. As we argue above, potential terrorists decide whether or not to engage in violence in part based on the likelihood of success in influencing relevant audiences to pressure the leader for policy changes. In dictatorships that generate high levels of audience costs, terrorists expect that this likelihood is higher than in dictatorships that are unable to generate audience costs; as a result, terrorist activity is more likely in states—both dictatorships and democracies—where audience costs are relatively high. This discussion of audience costs, along with our previous argument about the means by which terrorists choose their targets, leads to two testable hypotheses:

**Hypothesis 1:** *Military dictatorships, single-party dictatorships, and dynastic monarchies experience as many terrorist attacks, on average, as democracies.*

**Hypothesis 2:** *Personalist dictatorships and non-dynastic monarchies experience fewer attacks, on average, than democracies and other dictatorships.*

Figure 1 visually displays the aforementioned hypotheses, showing the relationship among democratic and dictatorial regime types, the degree of audience costs generated within those regimes, and the consequent frequency of expected terrorist attacks. We expect no differences among the regimes stacked on top of each other in Figure 1, and we expect a higher number of attacks to occur in regimes on the right-hand side of the continuum as compared to those regimes on the left-hand side of the figure.

## Research Design

Domestic institutions in dictatorships can sometimes generate audience costs akin to those in democracies. Consequently, we predict that dictatorships that can generate audience costs will experience more terrorist violence than dictatorships unable to generate audience costs. In order to test the effect of audience costs on the occurrence of terrorism in dictatorships, we first classify democratic and nondemocratic regime types by their relative levels of audience costs. We then analyze the statistical relationship between regime type and the amount of terrorism that a state experiences in a given year. Our analysis includes all domestic and transnational terrorist

<sup>19</sup> Regimes that do not fit any of these criteria are classified as mixed non-democracies. Weeks (2008) argues that their leaders should not have any special ability to control elites and therefore should be no different than democracies, single-party regimes, military regimes, or dynastic monarchies in their ability to generate audience costs.

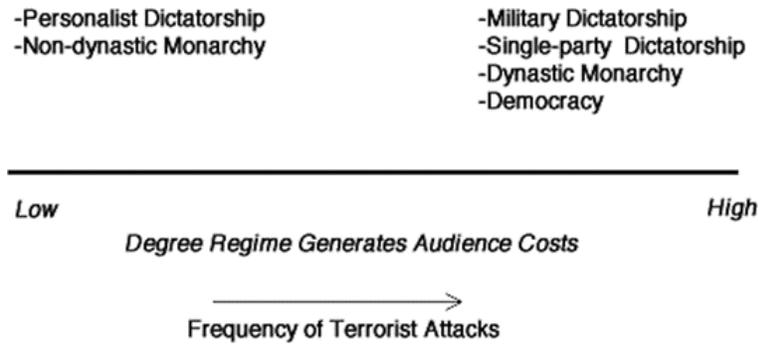


FIG 1. The Relationship among Regimes, Audience Costs, and Terrorist Attacks

attacks that occurred during the period 1970–2000. Our unit of analysis is the country-year.<sup>20</sup> To summarize our theoretical expectations, since military regimes, single-party regimes, and dynastic monarchies have relatively credible ways in which a leader can be held accountable and removed from office, these regimes should be as susceptible to terrorism as democracies. By contrast, personalist regimes and non-dynastic monarchies do not have the same apparatus of accountability and should experience fewer attacks, on average, than democracies.

Insights by Geddes (2003) and Weeks (2008) allow us to map the concept of audience costs onto states' institutional regime types. Geddes (2003) provides the information necessary to classify dictatorships into military regimes, single-party regimes, and personalist dictatorships based on a set of 13–15 unique criteria. For instance, military regimes must meet the criteria of having a procedure for rotating the highest office, as well as having a retired or active general or the equivalent serving in the executive leadership role. Single-party regimes typically require party membership for government employees, and members of the governing body are chosen by "routine party procedures." We also include regimes identified by Geddes (2003) as "hybrid" single-party and military regimes in our analysis. We do not expect them to generate audience costs at a different rate than either pure single-party or pure military regimes as they similarly have some means for removing the leader and thus generating higher levels of audience costs.

To be considered a personalist regime, the political system should have a leader who lacks the support of a party, and or a situation where a party was created after the leader came to power. Following Weeks (2008), we code hybrid personalist regimes as pure personalist regimes, as we expect the barriers to succession in any personalist regime outweigh the features of military and single-party regimes. To these four categories, Weeks (2008) adds three more types of nondemocracies: dynastic monarchies, non-dynastic monarchies, and "other" mixed nondemocracies. In non-dynastic monarchies, power is invested only in the monarch. In dynastic monarchies, the monarch's family controls the government, and there are established procedures by which family members move up through the ranks of power. Mixed nondemocracies are regimes that are neither democratic, nor monarchical.

In addition to the above classifications, Weeks (2008) identifies two categories of regimes that are so unstable that they do not last longer than 3 years: democratic and nondemocratic interregna. Although the international visibility of these states' political processes may vary, domestic audiences should be acutely aware of threats to a new leader's tenure. When terrorists operate under the auspices of unstable governments, they face incentives to engage in violence to undermine the current regime. Since security issues are often particularly salient in new regimes, the ability of the new government to protect citizens from violence "signifies how well or how poorly the (regime has) performed in dealing with very real challenges" (Nordlinger 1972:4). Pulling off a successful attack against a new government which lacks the support to consolidate its power may further undermine its authority and may even inspire more violence. This expectation is consistent with a long line of empirical research finding that unstable political environments are breeding grounds for political violence: Younger democracies are at a higher risk of political violence than other states because groups have an opportunity to capitalize on the political instability of these transitioning states and launch attacks (Gurr 1993, 2000), and civil war is more likely in democracies that have recently experienced a regime change than in consolidated democracies (Hegre, Ellingsen, Gates, and Gleditsch 2001). As with civil war and insurgency, empirical evidence points to a significant relationship between political instability and terrorist attacks. Countries that have recently transitioned, or are in the process of transitioning, from one regime type to another experience the most terrorist events (Eyerman 1998; Eubank and Weinberg 2001). And insofar as failed states are the most extreme form of instability, Piazza (2008) finds them to be the location of a disproportionate number of terrorist attacks, as compared to states with stable, functioning governments. We therefore expect that leaders of new and transitioning regimes will incur high audience costs associated with terrorist attacks.

Weeks (2008) categorizes a state as a new democracy or nondemocracy if it experienced at least a three-point change in its Polity democracy score within the last 3 years.<sup>21</sup> Democracies are then classified as states that currently score a "7" or higher on the scale, with nondemocracies scoring a "6" or lower. We expect both categories of "new" regimes to have a statistically significant and

<sup>20</sup> Young and Findley (2011) suggest using a dyadic design when modeling transnational terrorism. In this case, however, our concern is with domestic institutions that generate audience costs rather than dyadic interactions that might influence this process.

<sup>21</sup> Marshall, Gurr, Davenport, and Jagers (2002) offer a number of regime characteristics, commonly aggregated to a single dimension, referred to as the Polity democracy scale. This indicator ranges from -10 to 10 with higher levels corresponding to increased levels of democracy.

TABLE 1. Terrorist Attacks by Regime Type

	<i>Mean Transnational Attacks (SD)</i>	<i>Mean Domestic Attacks (SD)</i>
Democracy	3.98 (10.29)	15.34 (51.04)
Single Party	0.61 (1.71)	1.51 (10.19)
Military	2.93 (5.97)	8.06 (29.09)
Dynastic Monarchy	0.49 (1.49)	0.31 (1.35)
Other	0.58 (2.33)	6.50 (26.83)
Personalist	0.90 (2.34)	3.05 (22.20)
Non-dynastic Monarchy	1.32 (2.60)	0.59 (1.26)
Transitional Democracy	3.20 (7.50)	16.33 (39.13)
Transitional NonDemocracy	3.53 (9.92)	10.66 (37.89)
Hybrid	0.30 (0.78)	0.27 (1.31)

positive relationship with the number of terrorist attacks that a state experiences. Table 1 shows the frequency of terrorist attacks experienced by each regime type.

Our dependent variable is the number of terrorist attacks in a given country-year. The data for our dependent variable come from two sources. First, the International Terrorism: Attributes of Terror Events (ITERATE) data set provides information on purely transnational attacks during the entire temporal period of our study (Mickolus, Sandler, Murdock, and Flemming 2003). The database defines transnational terrorist attacks as those in which the “location, the nature of (their) institutional or human victims, or the mechanics of (their) resolution, (their) ramifications transcend national boundaries.” The mean number of attacks identified by ITERATE in a given year in our sample is 2.87. Most states experience 0 attacks (52% of observations), while the most attacks experienced in a single year is 181. Our second measure of terrorist attacks identifies only domestic attacks. The data are drawn from the Global Terrorism Database (START 2011), which maintains information on more than 80,000 terrorist attacks. To be included in the data, an incident must represent a violent, intentional act by a nonstate actor. The act must also be committed in the pursuit of a political, economic, religious, or social goal with the intention to “coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims.” Finally, the attack must not occur within the context of legitimate warfare.<sup>22</sup>

In addition to variables capturing regime type, we include several control variables that are widely expected to influence the number of terrorist attacks.<sup>23</sup> The level of Ethnic Fractionalization and Religious Fractionalization of each state is drawn from Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg (2003). Each variable takes on a value between zero and one and represents the probability that two citizens chosen randomly from a country would be from separate ethnic or religious groups. Both variables should be positively related to the number of terrorist attacks since higher fractionalization is likely to increase the probability of divergent preferences between groups. Individuals in less developed states are thought to have more grievances and therefore more reasons to use terrorism against the state. Conversely,

Krueger and Laitin (2008) have demonstrated that wealthier states are more often the targets of transnational terrorism. Since both hypotheses expect a relationship between development and terrorism, we include GDP Per Capita, measured as the log of a state’s real gross domestic product per capita, adjusted for purchasing power parity (Heston, Summers, and Aten 2006). We also include a measure of conflict, which equals “1” if the state is involved in an interstate war in a given year, and “0” otherwise (Gleditsch, Wallensteen, Eriksson, Sollenberg, and Strand 2002). States involved in conflict should have more reasons to be targeted by terrorists than states not involved in such conflict. Countries that have experienced terrorism in the past should also be more likely to experience terrorism in the present time period, so we include a moving average of the dependent variable, Past Terrorism, to account for temporal dependence. Finally, we control for logged population size (Population) and include dummy variables for region.<sup>24</sup>

Because our dependent variable is a count of domestic and transnational terrorist attacks, we utilize a negative binomial model, which has become standard in studies of terrorism that include event counts as the outcome of interest. Due to the structure of our dependent variable, the negative binomial model offers two benefits over other empirical strategies. First, it is more methodologically appropriate for count data than ordinary least squares (OLS) regression, which produces biased coefficient estimates when the dependent variable is categorical (Long and Freese 2001). Second, unlike the Poisson model, the negative binomial model also accounts for overdispersion, which can lead to standard errors that are biased downwards.<sup>25</sup>

Since both the ITERATE data and the GTD data are coded from news reports, the probability that an attack is recorded in our data is directly related to the level of press freedom in a given state. And since press freedom is likely to be correlated with the level of democracy, the results of our negative binomial analysis will likely suffer from systematic bias (Drakos and Gofas 2006a). The practical outcome of this bias is that both data sets include an abundance of zeros—country-years in which states appear to have never experienced a terrorist attack. This suggests that there are potentially two populations of states within the data: those that never experience a terrorist attack, and those that may or may not experience an attack that goes unrecorded. Because the probability of being a “never 0” state is partially a function of democracy, Drakos and Gofas (2006b) suggest the use of a zero-inflated negative binomial model. The zero-inflated approach allows us to explicitly model the process by which the “never 0s” are generated.<sup>26</sup> To account for the possibility of systematic measurement error in our dependent variable, we also include a zero-inflated negative binomial analysis using each state’s Polity score as the predictor of the zero inflation (Drakos and Gofas 2006b). We perform a Vuong (1989) test to compare the appropriateness of

<sup>24</sup> The Middle East is the reference category.

<sup>25</sup> Overdispersion occurs when the variance exceeds the mean. In the Poisson model, the variance is assumed to equal the mean. The negative binomial model adds a parameter to account for this dispersion and reduces to the Poisson when this parameter is equal to zero (Long and Freese 2001). Without accounting for overdispersion, we may underestimate our standard errors.

<sup>26</sup> Drakos and Gofas (2006b) use a state’s Polity IV autocracy–democracy score to predict the zero-inflation bias (since less democratic states should be more likely to never see terrorist attacks).

<sup>22</sup> The subset of domestic attacks in the GTD database was then culled by Enders et al. (2011) and was reshaped into a format appropriate for this study by Piazza (2011).

<sup>23</sup> See Moore, Bakker, and Hill (2011) and Gassebner and Luechinger (2011) for comprehensive reviews of the correlates of terrorism.

the zero-inflated model to the standard negative binomial analysis. The Vuong statistic for zero-inflated models using ITERATE does not suggest that this approach is preferred to a simple negative binomial ( $z = 0.69$   $\text{Pr} > z = 0.25$ ). In the GTD models, the Vuong statistic suggests that the zero-inflated model is preferred ( $z = 4.45$   $\text{Pr} > z = 0.00$ ). To ensure that our results are not sensitive to this modeling choice, we present results from both models below.

### Empirics and Discussion

Table 2 provides our main results on the effect of audience costs—proxied by dictatorial institutions—on transnational terror (Column 1) and domestic terror (Column 2). Models 1 and 2 include the same set of independent variables, but the dependent variable in Model 1 is the ITERATE count of transnational terrorist attacks, while Model 2 utilizes the GTD count of domestic attacks. In our first hypothesis, we predicted that single-party regimes, military regimes, and dynastic monarchies should be statistically indistinguishable from democracies with regard to their number of terrorist attacks. We find support for this hypothesis in both models; single-party, military, and dynastic monarchical regimes experience neither more nor less terrorism than the reference category of stable democracies. Only in the model of transnational terror (Model 1) are single-party regimes found to have a significant (negative) effect on terrorism. In Hypothesis 2, we predicted that personalist dictatorships and non-dynastic monarchies experience systematically fewer terrorist attacks than democracies because of their relative inability to generate audience costs. Again, both Models 1 and 2 are consistent with this

expectation: the personalist and non-dynastic monarchy categories are negative and highly significant across both models of terror.

Our expectation that transitional, or new, regimes should be particularly prone to terrorist attacks is also supported. The results from Models 1 and 2 show that new democracies and new nondemocracies (<3 years old) experience much more terrorism, on average, than stable democracies. Both categories are highly significant and positive across the two model specifications. We conclude, therefore, that instability itself can be a powerful determinant of terrorism. Finally, across the two models, there seems to be only one major anomaly that does not conform to our expectations: The “hybrid” category is consistently negative and significant, indicating that hybrid regimes experience fewer attacks, on average, than stable democracies. Since this category represents regimes that are a mix of single-party and military institutional designs, we expected a statistically insignificant effect, along the lines of the more straightforward single-party and military categories. We can only speculate that the irregular nature of these regimes impacts their ability to generate audience costs in a way that we have not yet identified. This strikes us as an area ripe for future work.

The other control variables included in each of the models in Table 2 generally perform as expected. A country’s population size and past incidents of terrorism both have positive and significant effects on the number of terrorist attacks that a state experiences today. All the regions of the world also tend to experience fewer terrorist events than the Middle East. Interestingly, however, the level of religious fractionalization in a given country-year seems to have the opposite effect that we expected ex-ante: higher fractionalization leads to fewer attacks, rather than more terrorist violence.

Although coefficient estimates are telling of the direction and statistical significance of relationships in count models, they provide little information about the substantive effect of our main independent variables on the incidence of terrorist attacks. Table 3 summarizes the substantive effects of several of the regime categories based on the model of transnational terrorism (Model 1) in Table 2. The top row of Table 3 lists the expected count of terrorist attacks for a democracy located in the Middle East, when all other control variables are held at their mean or median levels. Such a state can expect, on average, to experience 2.05 attacks in a given year. If the same country became a personalist dictatorship instead of a democracy, it could expect nearly 28% fewer attacks. Although the 95% confidence intervals for these two categories overlap slightly, the difference is still statistically significant at the 95% level. Non-dynastic monarchies can expect even fewer attacks: around 1.23 in a given year. Table 3 also lists the expected count of terrorist attacks in new and transitioning regimes in the last two rows of the table. New democracies and new nondemocracies can expect around 37% and 54% more attacks, respectively, than a comparable stable democracy.<sup>27</sup>

As discussed above, underreporting and other features of less democratic states suggest there is a substantial threat of systematic bias in the data. In order to correct for this potential bias, we follow the suggestion of Drakos and Gofas (2006b) and analyze our models using a zero-inflated negative binomial in Table 4. Table 4 lists

TABLE 2. Effects of Audience Cost Producing Regimes on Terrorist Attacks, 1970–2000

	ITERATE	
	Model 1 <i>b</i> (SE)	GTD Model 2 <i>b</i> (SE)
Single Party	-0.274 (0.140)	-0.278 (0.274)
Military	0.120 (0.173)	-0.110 (0.292)
Dynastic Monarchy	-0.347 (0.760)	-0.262 (0.825)
Other	-0.256 (0.125)*	0.547 (0.157)**
Personalist	-0.332 (0.119)**	-0.423 (0.172)*
Non-dynastic Monarchy	-0.506 (0.174)**	-1.404 (0.299)**
Transitional Democracy	0.423 (0.107)**	0.663 (0.148)**
Transitional	0.312 (0.160)	0.712 (0.165)**
NonDemocracy		
Hybrid	-1.195 (0.278)**	-1.707 (0.578)**
GDP	-0.072 (0.056)	-0.101 (0.070)
Population	0.206 (0.026)**	0.498 (0.034)**
Conflict	-0.297 (0.129)*	-0.539 (0.207)**
Ethnic Fractionalization	-0.074 (0.157)	-0.352 (0.227)
Religious Fractionalization	-0.614 (0.151)**	-0.400 (0.205)
Europe	-0.247 (0.116)*	-0.754 (0.186)**
Asia	-0.609 (0.142)**	-1.00 (0.194)**
America	-0.269 (0.114)*	-0.386 (0.178)*
Africa	-1.127 (0.156)**	-0.955 (0.229)**
Past Terror	0.132 (0.007)**	0.070 (0.005)**
Constant	-1.940 (0.721)**	-5.620 (0.828)**
AIC	10746	12758
BIC	10874	12885
<i>N</i>	3240	3208

\* $p < 0.05$  (two-tailed; Robust standard errors in parentheses).

<sup>27</sup> However, the 95% confidence interval for the difference between democracies and new democracies overlaps zero.

TABLE 3. Substantive Effects of Selected Categories, Model 1

	<i>Expected Count of Transnational Attacks</i>	<i>Difference in Counts</i>	<i>Percentage Change (%)</i>
Democracy (Baseline)	2.05	–	–
Personalist	1.47	–0.58 [–1.03, –0.19]	–28.3
Non-dynastic Monarch	1.23	–0.82 [–1.45, –0.26]	–40.0
Transitional NonDemocracy	3.14	1.10 [0.51, 1.72]	+53.7
Transitional Democracy	2.80	0.76 [–0.02, 1.67]	+37.1

All estimates assume country is located in the Middle East. Remaining independent variables held constant at mean or median. Values in brackets are 95% confidence intervals.

TABLE 4. Effects of Audience Cost Producing Regimes on Terrorist Attacks (ZINB), 1970–2000

<i>Count Equation</i>	<i>ITERATE</i>	
	<i>Model b(SE)</i>	<i>GTD Model 4 b(SE)</i>
Single Party	–0.159 (0.150)	0.225 (0.304)
Military	0.191 (0.177)	0.324 (0.311)
Dynastic Monarchy	–0.374 (0.714)	0.171 (0.795)
Other	0.005 (0.128)	0.916 (0.166)**
Personalist	–0.239 (0.126)	0.088 (0.175)
Non-dynastic Monarchy	–0.539 (0.172)**	–1.133 (0.266)**
Transitional NonDemocracy	0.463 (0.106)**	0.773 (0.144)**
Transitional Democracy	0.337 (0.161)*	0.736 (0.167)**
Hybrid	–1.134 (0.277)**	–1.222 (0.585)**
GDP	–0.035 (0.056)	–0.135 (0.069)
Population	0.129 (0.028)**	0.447 (0.035)**
Conflict	–0.272 (0.122)*	–0.368 (0.192)
Ethnic Fractionalization	–0.074 (0.161)	–0.710 (0.218)**
Religious Fractionalization	–0.677 (0.157)**	–0.543 (0.213)*
Europe	–0.299 (0.116)*	–0.901 (0.191)**
Asia	–0.575 (0.142)**	–1.197 (0.202)**
America	–0.326 (0.111)**	–0.589 (0.184)**
Africa	–1.148 (0.156)**	–1.071 (0.245)**
Past Terror	0.139 (0.007)**	0.062 (0.004)**
Constant	–0.954 (0.712)	–4.048 (0.817)**
Inflation Equation		
Democracy	–0.284 (0.036)**	–0.338 (0.059)**
Constant	–4.765 (0.837)**	–2.664 (0.466)**
AIC	10482	12441
BIC	10620	12579
N	3058	3048

\*p < 0.05 (two-tailed; Robust standard errors in parentheses).

results of the same model specifications that were presented in Table 2, but they now include democracy (Polity score) as the predictor of the zero inflation. As expected, the more democratic a state, the less likely that it will never experience a terrorist attack of any kind.<sup>28</sup> After accounting statistically for the excess zeros, the model still generally conforms to our hypothetical expectations. Single-party, military, and dynastic regimes

are again statistically indistinguishable from democracies. Personalist dictatorships and non-dynastic monarchies experience fewer terrorist attacks than democracies, supporting Hypothesis 2. It should be noted, however, that the personalist category is only significant in the transnational model (Model 3). Finally, new democracies and nondemocracies consistently experience more terrorist attacks than stable democracies, while the other control variables influence the dependent variables similar to Models 1 and 2.

Taken together, the results offer strong support for our central hypotheses. Dictatorships that are unable to generate meaningful audience costs—personalist dictatorships and non-dynastic monarchies—experience the fewest number of terrorist attacks, while new and transitional regimes experience the most. In between these extremes are stable democracies, military regimes, single-party regimes, and dynastic monarchies, all of which generate comparable audience costs and consequently experience similar numbers of terrorist attacks.

## Conclusion

In contrast to the prevailing wisdom, we argue that the significant variation in the numbers of terrorist attacks against autocratic regimes can be explained by the degree to which those regimes generate audience costs. This result cannot be explained by a simple democracy–dictatorship dichotomy, nor can reporting bias explain the variation in attacks across the dictatorial regimes. Using an audience cost approach, we provide a relatively parsimonious explanation for both the difference in the number of terrorist attacks between democracies and dictatorships, as well as differences in the number of attacks experienced by dictatorial regimes more specifically. We find empirical evidence that dictatorships generating higher audience costs—military dictatorships, single-party dictatorships, and dynastic monarchies—experience as much terrorism as democracies, while autocracies generating lower audience costs—personalist dictatorships and non-dynastic monarchies—face fewer attacks than their democratic counterparts.

Like Weeks (2008), we apply audience cost arguments to explain variation in political outcomes in dictatorships. Whereas Weeks (2008) focuses on the impact of audience costs in the realm of international conflict, however, we extend the audience costs logic to explain internal violence. To do so, we argue that knowledge of audience costs affects not only leader behavior, but also the behavior of nonstate actors like potential terrorists. When nonstate actors like terrorists know that leaders face high audience costs, it can potentially change their behavior. As far as we know, this is the first study to use an audience costs framework to study the behavior of nonstate actors, as well as the first attempt to use audience costs arguments to shed light on the processes of internal violence. Similar to the theories like the security dilemma (Posen 1993) or alliance behavior (Asal and Rethemeyer 2008), we believe the audience cost logic to be potentially useful in explaining other domestic conflict processes.<sup>29</sup> Although we have focused on explaining the frequency of terrorist attacks, the audience costs logic might also be useful in explaining other types of domestic contention

<sup>28</sup> Again, Vuong tests reveal that only in the case of Model 4 is the zero-inflated negative binomial preferred to the standard negative binomial.

<sup>29</sup> According to Lake (2003), such theories transcend the domestic/international dichotomy and show promise for developing a more general framework for understanding conflict.

including violent insurgency, nonviolent campaigns, or civil war.

From Fearon (1994) to more recent explanations of the effects that audience costs have on foreign policy behavior, the term audience cost has been generally associated with positive outcomes. Fearon (1994) suggested that since audience costs allow democracies to credibly signal resolve, they should make democracies less attractive targets for other states' foreign policy adventures. We suggest a potentially more unsettling aspect to audience costs: They may provide terrorists with incentives to attack the state. In sum, our application to domestic and transnational terrorism suggests a dark side to audience costs that is not expressed in the current literature.

Disaggregating dictatorship by the extent to which domestic institutions generate audience costs led to novel expectations about why regimes experience terrorist attacks. But the audience costs framework provides an opportunity to move beyond the regime-type arguments currently pervasive in the literature on terrorism. While we focus on the effect of audience costs on terrorist attacks in dictatorships,<sup>30</sup> Audience costs could be used in future work to explain variation in the incidence of terrorism both across regime types and within democracies.<sup>31</sup> First, both democratic and nondemocratic leaders face audience costs; as a result, the audience costs framework has the potential to explain terrorism across the democracy–dictatorship dichotomy—much like arguments about winning coalitions (Bueno de Mesquita et al. 2003) and veto players (Tsebelis 2002) explain political outcomes with domestic institutions that exist across regime type.

Second, variation in audience costs may also occur as a result of institutional variation within democracies. There is a great deal of variation masked by democracy—both in terms of differences in democratic institutions and the extent to which democracies experience terrorism (for example, Eubank and Weinberg 1994; Eyerman 1998; Li 2005; Findley and Young 2011). Heterogeneous democratic institutions may generate different audience costs, which may affect the incidence of terrorist attacks across regime types. As such, a comparison of audience costs both within democracy and across disaggregated categories of democracy and dictatorship could lead to a more nuanced understanding of the conditions under which audience costs influence political violence.

## References

- 9/11 COMMISSION. (2004) *The 9/11 Commission Report*. New York, NY: W.W. Norton.
- ABRAHMS, MAX. (2007) Why Democracies Make Superior Counterterrorists. *Security Studies* 16(2): 223–253.
- ABRAHMS, MAX. (2008) What Terrorists Really Want: Terrorist Motives and Counterterrorism Strategy. *International Security* 32(4): 78–105.
- ABRAHMS, MAX. (2011) Does Terrorism Really Work? Evolution in the Conventional Wisdom Since 9/11. *Defence and Peace Economics* 22(6): 583–594.

- AKSOY, DENIZ, DAVID B. CARTER, AND JOSEPH WRIGHT. (2012) Terrorism in Dictatorships. *The Journal of Politics* 74(3): 810–826.
- ALESINA, ALBERTO, ARNAUD DEVLEESCHAUWER, WILLIAM EASTERLY, SERGIO KURLAT, AND ROMAIN WACZIARG. (2003) Fractionalization. *Journal of Economic Growth* 8: 155–194.
- ALVAREZ, MICHAEL, JOSE CHEIBUB, FERNANDO LIMONGI, AND ADAM PRZEWORSKI. (1996) Classifying Political Regimes. *Studies in Comparative International Development* 31(2): 1–37.
- 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): 437–449.
- BERRÉBI, CLAUDE, AND ESTEBAN F. KLOR. (2006) On Terrorism and Electoral Outcomes. *Journal of Conflict Resolution* 50(6): 899–925.
- BERRÉBI, CLAUDE, AND ESTEBAN F. KLOR. (2008) *Are Voters Sensitive to Terrorism? Direct Evidence from the Israeli Electorate*. New York: Cambridge University Press.
- BLOOM, MIA. (2005) *Dying to Kill: The Allure of Suicide Bombing*. New York: Columbia University Press.
- BRAITHWAITE, ALEX, AND QUAN LI. (2007) Transnational Terrorism Hot Spots: Identification and Impact Evaluation. *Conflict Management and Peace Science* 24(4): 281–296.
- BUENO DE MESQUITA, BRUCE, JAMES D., MORROW, RANDOLPH M. SIVERSON, AND ALASTAIR SMITH. (1999) An Institutional Explanation of the Democratic Peace. *American Political Science Review* 93(4): 791–807.
- BUENO DE MESQUITA, BRUCE, ALASTAIR SMITH, RANDOLPH M. SIVERSON, AND JAMES M. MORROW. (2003) *The Logic of Political Survival*. Cambridge: MIT Press.
- BUENO DE MESQUITA, ETHAN, AND ERIC S. DICKSON. (2007) The Propaganda of the Deed: Terrorism, Counterterrorism, and Mobilization. *American Journal of Political Science* 51(2): 364–381.
- CHEIBUB, JOSE A., JENNIFER GANDHI, AND JAMES R. VREELAND. (2010) Democracy and Dictatorship Revisited. *Public Choice* 143(1): 67–101.
- DRAKOS, KONSTANTINO, AND ANDREAS GOFAS. (2006a) The Devil You Know but are Afraid to Face: Underreporting Bias and Its Distorting Effects on the Study of Terrorism. *Journal of Conflict Resolution* 50(5): 714–735.
- DRAKOS, KONSTANTINO, AND ANDREAS GOFAS. (2006b) In Search of the Average Transnational Terrorist Attack Venue. *Defence and Peace Economics* 17(2): 73–93.
- ENDERS, WALTER, AND TODD SANDLER. (2006) *The Political Economy of Terrorism*. New York: Cambridge University Press.
- ENDERS, WALTER, TODD SANDLER, AND KHUSRAV GAIBULLOEV. (2011) Domestic versus Transnational Terrorism: Data, Decomposition, and Dynamics. *Journal of Peace Research* 48(3): 319–337.
- EUBANK, WILLIAM, AND LEONARD WEINBERG. (1994) Does Democracy Encourage Terrorism? *Terrorism and Political Violence* 6(4): 417–435.
- EUBANK, WILLIAM, AND LEONARD WEINBERG. (2001) Terrorism and Democracy: Perpetrators and Victims. *Terrorism and Political Violence* 13(1): 155–164.
- EYERMAN, JOSEPH. (1998) Terrorism and Democratic States: Soft Targets or Accessible Systems? *International Interactions* 24(2): 151–170.
- FEARON, JAMES D. (1994) Domestic Political Audiences and the Escalation of International Disputes. *American Political Science Review* 88(3): 577–592.
- FINDLEY, MICHAEL G., AND JOSEPH K. YOUNG. (2011) Terrorism, Democracy, and Credible Commitments. *International Studies Quarterly* 55(2): 357–378.
- FRIEDEN, JEFFREY A., DAVID A. LAKE, AND KENNETH A. SCHULTZ. (2010) *World Politics: Interests, Interactions, Institutions*. New York: W. W. Norton.
- GAIBULLOEV, KHUSRAV, AND TODD SANDLER. (2008) Growth Consequences of Terrorism in Western Europe. *Kyklos* 61(3): 411–424.
- GANDHI, JENNIFER. (2008) *Political Institutions under Dictatorship*. New York: Cambridge University Press.
- GANDHI, JENNIFER, AND ADAM PRZEWORSKI. (2006) Cooperation, Cooptation, and Rebellion under Dictatorships. *Economics & Politics* 18(1): 1–26.
- GANDHI, JENNIFER, AND ADAM PRZEWORSKI. (2007) Authoritarian Institutions and the Survival of Autocrats. *Comparative Political Studies* 40(11): 1279–1301.
- GASSEBNER, MARTIN, AND SIMON LUECHINGER. (2011) Lock, Stock, and Barrel: A Comprehensive Assessment of the Determinants of Terror. *Public Choice* 149(3): 235–261.

<sup>30</sup> Although there is a burgeoning literature on the effect of dictatorial institutions on political outcomes (for example, Gandhi and Przeworski 2006; Gandhi 2008; Vreeland 2008; Weeks 2008; Wright 2008), we know of no work other than Piazza and Wilson (2013) and Aksoy et al. (2012) that focuses on the effect of dictatorial institutions on terrorist attacks.

<sup>31</sup> We thank an anonymous reviewer for encouraging us to make this argument.

- GASSEBNER, MARTIN, RICHARD JONG-A-PIN, AND JOCHEN O. MIERAU. (2011) Terrorism and Cabinet Duration. *International Economic Review* 52(4): 1253–1270.
- GAUBATZ, KURT T. (1996) Democratic States and Commitment in International Relations. *International Organization* 50(1): 109–139.
- GEDDES, BARBARA. (2003) *Paradigms and Sand Castles*. Ann Arbor: University of Michigan Press.
- GEDDES, BARBARA. (2005) Why Parties and Elections in Authoritarian Regimes? Paper Presented at the Annual meeting of the American Political Science Association, Washington, DC.
- GLEDITSCH, NILS PETER, PETER WALLENSTEEN, MIKEAL ERIKSSON, MARGARETA SOLLENBERG, AND HÅVARD STRAND. (2002) Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research* 39(5): 615–637.
- GOODWIN, JEFF. (2006) A Theory of Categorical Terrorism. *Social Forces* 84: 2027–2046.
- GURR, TED. (1993) *Minorities at Risk: A Global View of Ethnopolitical Conflict*. Washington, DC: United States Institute of Peace.
- GURR, TED. (2000) *People versus States: Ethnopolitical Conflict and Accommodation at the End of the Twentieth Century*. Washington, DC: United States Institute of Peace.
- HEGRE, HÅVARD, TANJA ELLINGSEN, SCOTT GATES, AND NILS PETER GLEDITSCH. (2001) Toward a Democratic Civil Peace? Democracy, Political Change and Civil War, 1916–1992. *American Political Science Review* 95: 33–48.
- HESTON, ALAN, ROBERT SUMMERS, AND BETTINA ATEN. (2006) PennWorld Table Version 6.2. Center for International Comparisons of Production Income and Prices at the University of Pennsylvania. Available at <http://pwt.econ.upenn.edu/>. (Accessed November 1, 2011.)
- HOFFMAN, BRUCE. (2006) Insurgency and Counterinsurgency in Iraq. *Studies in Conflict & Terrorism* 29(2): 103–121.
- HORGAN, JOHN. (2008) From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalization into Terrorism. *The Annals of the American Academy of Political and Social Science* 618(1): 80–94.
- HUTH, PAUL K., AND TODD L. ALLEE. (2002) Domestic Political Accountability and the Escalation and Settlement of International Disputes. *Journal of Conflict Resolution* 46(6): 754–790.
- KRUEGER, ALAN, AND DAVID LAITIN. (2008) Kto Kogo? A Cross-country Study of the Origins and Targets of Terrorism. In *Terrorism, Economic Development and Political Openness*, edited by Philip Keefer and Norman Loayza. New York: Cambridge University Press.
- KYDD, ANDREW H., AND BARBARA F. WALTER. (2002) Sabotaging the Peace: The Politics of Extremist Violence. *International Organization* 56(2): 263–296.
- KYDD, ANDREW H., AND BARBARA F. WALTER. (2006) The Strategies of Terrorism. *International Security* 31(1): 49–80.
- LAI, BRIAN. (2007) Draining the Swamp: An Empirical Examination of the Production of International Terrorism, 1968–1998. *Conflict Management and Peace Science* 24(4): 297–310.
- LAKE, DAVID A. (2002) Rational Extremism: Understanding Terrorism in the Twenty-First Century. *Dialogue* 10 1(1): 15–29.
- LAKE, DAVID A. (2003) International Relations Theory and Internal Conflict: Insights from the Interstices. *International Studies Review* 5 (4): 81–89.
- LEEDS, BRETT ASHLEY. (1999) Domestic Political Institutions, Credible Commitments, and International Cooperation. *American Journal of Political Science* 43(4): 979–1002.
- LI, QUAN. (2005) Does Democracy Promote or Reduce Transnational Terrorist Incidents? *Journal of Conflict Resolution* 49(2): 278–297.
- LONG, J. SCOTT, AND JEREMY FREESE. (2001) *Regression Models for Categorical Dependent Variables Using Stata*. College Station: Stata Press.
- MARSHALL, MONTY, TED ROBERT GURR, CHRISTIAN DAVENPORT, AND KEITH JAGGERS. (2002) Polity IV, 1800–1999: Comments on Munck and Verkuilen. *Comparative Political Studies* 35(1): 40–45.
- MCGILLIVRAY, FIONA, AND ALASTAIR SMITH. (2000) Trust and Cooperation through Agent-specific Punishments. *International Organization* 54(4): 809–824.
- MICKOLUS, EDWARD F., TODD SANDLER, JEAN M. MURDOCK, AND PETER FLEMMING. (2003) *International Terrorism: Attributes of Terrorist Events, 1968–2001*. Dunn Loring, VA: Vinyard Software.
- MOORE, WILL, RYAN BAKKER, AND DANIEL HILL. (2011) How Much Terror? Dissidents, Governments, Institutions and the Cross-National Study of Terror Attacks, Unpublished manuscript.
- NORDLINGER, ERIC A. (1972) *Conflict Regulation in Divided Societies*. Cambridge, MA: Center for International Affairs, Harvard University.
- ORDEIX I RIGO, ENRIC. (2005) Aznars Political Failure or Punishment for Supporting the Iraq War? Hypotheses about the Causes of the 2004 Spanish Election Results. *American Behavioral Scientist* 49(4): 610–615.
- PAPE, ROBERT A. (2003) The Strategic Logic of Suicide Terrorism. *American Political Science Review* 97(3): 343–361.
- PARTELL, PETER J., AND GLENN PALMER. (1999) Audience Costs and Interstate Crises: An Empirical Assessment of Fearon’s Model of Dispute Outcomes. *International Studies Quarterly* 43(2): 389–405.
- PIAZZA, JAMES A. (2008) Do Democracy and Free Markets Protect Us From Terrorism? *International Politics* 45(1): 72–91.
- PIAZZA, JAMES A. (2011) Poverty, Minority Economic Discrimination, and Domestic Terrorism. *Journal of Peace Research* 48(3): 339–353.
- PIAZZA, JAMES, AND MATTHEW, WILSON. (2013) Dictatorships and Terrorism: Conditioning Effects of Authoritarian Regime-Type on Terrorist Attacks. Conditioning Effects of Authoritarian Regime-Type on Terrorist Attacks. *American Journal of Political Science*. Forthcoming.
- POSEN, BARRY. (1993) The Security Dilemma and Ethnic Conflict. In *Ethnic Conflict and International Security*, edited by Michael Brown. Princeton, NJ: Princeton University Press.
- POWELL, EMILIA J., AND JEFFREY K. STATON. (2009) Domestic Judicial Institutions and Human Rights Treaty Violation. *International Studies Quarterly* 53(1): 149–174.
- SCHULTZ, KENNETH A. (2001) *Democracy and Coercive Diplomacy*. New York: Cambridge University Press.
- SLANTCHEV, BRANISLAV L. (2006) Politicians, the Media, and Domestic Audience Costs. *International Studies Quarterly* 50(2): 445–477.
- SMITH, ALASTAIR. (1996) Diversionary Foreign Policy in Democratic Systems. *International Studies Quarterly* 40(1): 133–153.
- SMITH, ALASTAIR. (1998) International Crises and Domestic Politics. *American Political Science Review* 92(3): 623–638.
- START. (2011) Global Terrorism Database [Data file]. National Consortium for the Study of Terrorism and Responses to Terrorism. Available at <http://www.start.umd.edu/gtd>. (Accessed November 1, 2011.)
- SVOLIK, MILAN. (2009) Power Sharing and Leadership Dynamics in Authoritarian Regimes. *American Journal of Political Science* 53(3): 477–494.
- TOMZ, MICHAEL. (2007) Domestic Audience Costs in International Relations: An Experimental Approach. *International Organization* 61 (4): 821–840.
- TSEBELIS, GEORGE. (2002) *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- VREELAND, JAMES RAYMOND. (2008) Political Institutions and Human Rights: Why Dictatorships Enter into the United Nations Convention against Torture. *International Organization* 62(1): 65–101.
- VUONG, QUANG. (1989) Likelihood Ratio Tests for Model Selection and Non-nested Hypotheses. *Econometrica* 57: 307–333.
- WADE, SARA, AND DAN REITER. (2007) Does Democracy Matter? Regime Type and Suicide Terrorism. *Journal of Conflict Resolution* 51(2): 329–348.
- WEEKS, JESSICA. (2008) Autocratic Audience Costs: Regime Type and Signaling Resolve. *International Organization* 62(1): 35–64.
- WEINBERG, LEONARD, AND WILLIAM EUBANK. (1998) Terrorism and Democracy: What Recent Events Disclose. *Terrorism and Political Violence* 10(1): 108–118.
- WRIGHT, JOSEPH. (2008) Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment. *American Journal of Political Science* 52(2): 322–343.
- YOUNG, JOSEPH, AND LAURA DUGAN. (2011) Veto Players and Terror. *Journal of Peace Research* 48(1): 19–33.
- YOUNG, JOSEPH, AND MICHAEL FINDLEY. (2011) Promise and Pitfalls of Terrorism Research. *International Studies Review* 13(3): 411–431.