Warning Shots: Low-Level Violent Repression as a Signal of Violent State Resolve

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**Abstract:**

Primary to all other goals of the state is the goal of survival. While citizen well-being, economic prosperity, defensive strength, and other features of well-made states are undoubtedly more impressive and desirable traits, state survival and stability comprise the foundation upon which all other aspects of the state are built. As such, when emerging challengers threaten the state’s survival, it follows that the state will address the threat using whatever tools are at its disposal. Even better if the state is able to preempt said challengers before they emerge and damage the resources or perceived legitimacy of the state. Given the immense threat that challengers pose to survival, particularly when the state is developing or new, it follows that states would like to deter the emergence of such contenders using whatever resources are at their disposal, one such being the repression of their population and the targeting of any challengers that emerge. States do not know all the groups within their population that might emerge as challengers to the state’s authority and/or territory, so the entirety of the populous comprises a potential threat. So, why \textbf{\textit{wouldn't}} a state repress its population if the emergence of internal challengers would threaten the state's survival?

The answer to this is twofold - cost and efficacy. The use of repression against the civilian population carries both domestic and international costs for the state. The norm of civilian immunity is deeply ingrained in the international community and in international law (\cite{Bellamy2012a}). Violations of this norm can incur sanctions from abroad, loss of support, or decreased reputation. Domestically, the use of repression can cost the state the support of their citizens and the revenue the citizenry provides (\cite{DeMeritt2013a}). If the choice is between survival and the costs of repression, it may still be worth it for the state. This has been demonstrated to be true in autocracies where repression is much more likely when the threat of the leader losing power is high (\cite{Abouzzohour2021a}). So then, the true question is, is repression of a state’s population effective in preventing the emergence of challengers to the state’s survival?

I argue that the use of repression against a state’s civilian population not only is not successful in preventing the emergence of domestic territorial challengers, but also creates an environment in which potential challengers may see no viable alternative to seizing territory. Once a challenger has emerged and seized territory, however, this relationship becomes more complex as states encounter dual domestic audiences for their actions – the newly emerged group that has seized control of territory as well as the broader population from which additional challengers might emerge.

In this article, I put forth a theory explaining how a state’s use of repression influences the motivations and incentives for non-state actors within the sovereign state to seize control of territory. After laying out this theory, I generate a number of testable hypotheses regarding the emergence of a state’s first territorial contender as well as subsequent challengers. Using data on territorial contenders from Lemke and Crabtree (\citeyear{Lemke2020c}), I evaluate my hypotheses using a combination of repeat failure modeling and multiple interrupted time series designs. I conclude by situating these findings within the broader context of the state making and human rights literatures, proposing promising avenues for future research.

**Is Repression a State Making or State Breaking Tool?**

To unpack why states would choose to violate strong international norms and repress their citizens, it is important to start by stating what the state wants. While the motivations of the state may be complex and varied, underlying all else is the desire to survive. Much has been written regarding this fundamental desire for survival by the state, most notably by the late Charles Tilly (\cite{Tilly1975,Tilly1985,Tilly1990b}). Tilly paints a picture of states as actors\footnote{In this article, I focus on "the state" as a unitary actor. This is a strong assumption that glosses over much of the complexity of how governance actually occurs. However, I assert that such a simplification is necessary for isolating the interactions between non-state actors and the government of the sovereign state. Therefore, I leave the exploration of the actors within the state to future work.} who engage in a variety of essential activities with the purpose of protecting their resources, ensuring the survival of the state, and building up the governance structure through conflict and state making. Central among these activities is "attacking and checking competitors and challengers within the territory claimed by the state." (\cite[p. 96]{Tilly1990b}) This activity is referred to as "statemaking" by Tilly.

This central goal of state preservation and expansion necessitates that a steady and sufficient supply of resources be extracted from the state’s territory and population. While the state could use force to seize these resources from the population, a much more sustainable strategy is through continued resource extraction in the form of taxation. This is because it allows the state to continue gathering resources from the same population over time without having to find new sources of resources. The state can maximize its extractive capacity through developing the internal structure of the state, strengthening bureaucratic institutions, building physical infrastructure, and other internal improvements. Ensuring the continuation of their extractive capacity also requires the state to protect its core population and its current regime. These state making goals are directly challenged by oppositional or dissident factions from within the territory that disrupt the flow of resources and the stability of the area.

These internal challengers can come in many varieties. Examples of commonly studied categories of internal challengers are self-determination movements (\cite{Coggins2014a}), de facto states (\cite{Florea2014c}), unrecognized states (\cite{Caspersen2012c}), rebel groups (\cite{Arjona2016a,Huang2016c,Stewart2018c}), or territorial contenders (\cite{Lemke2020c,LemkeKarstens2022}). Opposition to the state can form along existing fault lines among the population such as socioeconomic, class, or ethnic identities, geographical similarities, or common goals. The threat posed by the opposition group is dependent on what demands it makes of the state (\cite{Gobel2021}), whether the group is actively in conflict with the government (\cite{Carey2010a}), how much the group's members contribute to the regime's financial or political survival (\cite{Conrad2013d,DeMeritt2013a}), and whether the group has seized control of territory (\cite{KarstensLemkeFragile}). The level of threat can vary drastically, from harmless dissent on the light end all the way to state failure on the extreme. While domestic and international costs of repression certainly matter in a state's decision to repress, the impact of these factors are mitigated by the threat posed by the opposition (\cite{Gartner1996a}). In cases where the state fears the level of threat is high enough to endanger its survival, I expect the state to want to take action to prevent or address the threat.

Many of the ways in which a state can check internal challengers and/or deter the emergence of opposition fall under the umbrella term of repression. Repression is the use or threat of physical sanctions against a person or group for the purpose of imposing costs on the target as well as discouraging certain actions or beliefs believed to be harmful by the state (\cite[p. xxvii]{Goldstein1978}). Repression can include violations of bodily integrity rights such as extrajudicial killing, torture, or starvation, as well as violations of civil rights like freedom of movement, speech, or assembly.\footnote{There is reason to believe that the form of repression affects how it is perceived by the repressed (\cite{FarissSchnak2014,Esberg2021a}). I do not address the effect that the form of a state's repressive strategy may have on deterring internal challengers in this article due to data availability. This is a promising area for future work.} While the means of repression differ from case to case, a constant fact is that repression is designed to use the coercive power of the state to manipulate the behavior of the target and the audience. In the context of state making, this can be rephrased being the state leveraging its coercive power to preempt or check rivals to the states continued survival or development.

In this article, I focus on repressive acts perpetrated by official state actors. States are the most studied perpetrators of repressive acts. This is not to say that non-state actors such as territorial contenders, rebel groups, secessionist movements, or terrorist organizations are not capable of committing similar repressive acts as states. Quite to the contrary, non-state actors can use strategies of repression to control or influence individuals in their areas of influence. However, I and many other repression scholars choose to focus on the state due to its unique access to repressive resources, monopoly on the legitimate use of force, and perceived legitimacy within its borders. When a state chooses to repress members of its population, it does so as an official actor. Its actions are being evaluated by its population, members of the regime’s winning coalition, as well as international actors. This influences the state’s decision-making process. This means that sometimes states might engage in repressive behaviors like censorship less for the purpose of manipulating the target and more for the satisfaction of its supporters (\cite{Esberg2020}).

When facing the threat of potential emergent challengers, a state may choose to use repression directly to eliminate or check internal rivals to the state's authority. Given the state is able to identify potential challengers or groups, it can use its coercive power to inhibit the threat's ability to function. Violent forms of repression can be used to eliminate group leaders or physically intimidate supporters, thus preventing them from mobilizing in the first place. Similarly, states can also use non-violent forms of repression to achieve this goal. Targeted surveillance or policing can be used to demonstrate control of the area and monitor the group’s behavior. Arbitrary arrests and political imprisonment can be used to directly remove group leaders without resorting to lethal force. And finally, forced migration can be used to move the population of the area to another region. All of these strategies are used to directly disrupt the formation of the internal challenger through the removal of leadership, the hindrance of organization, or the intimidation of supporters.

But what is a state to do if it does not know what groups to target? States do not always (or even often) target all members of their population with repression evenly. While a blanket, indiscriminate repressive strategy may be advantageous when the state does not know who among the citizenry are potential threats to the state’s survival, it is more cost effective and possibly more impactful if the repression is restricted to specific groups (\cite{Mason1989b}). From the perspective of the state, successful repression would consist of no or fewer active internal challengers to the state. A state need not wait for opposition to amass or do concrete harm to the state to begin a repressive campaign. In cases where the state anticipates the emergence of a serious threat from its population, it makes sense that the state would preemptively repress their population (\cite{NordasDavenport2013}). Preemptive repression could stifle the formation or organization of opposition through the denial of civil liberties and freedoms. Even if the state only represses a few potentially problematic groups or demographics, doing so could prevent the formation of unified opposition (\cite{Fedorowycz2021a}). Additionally, by flexing the repressive muscles of the state, the state signals its willingness to respond strongly to future opposition.

In general, when a state uses repression against its population, it attempts to deter the emergence of challengers and remove any pre-existing threats. From this, I derive hypothesis 1A:

**Hypothesis 1A:** States that heavily repress their civilians will be less likely to face domestic territorial challengers.

However, this story and hypothesis addresses only one part of the picture. Up to this point, I have focused solely on the risks internal challengers pose to the state and how the state is likely to respond to said challengers. This excludes, however, the arguably most important actor in the interaction, namely the audience of the state’s repressive actions: the citizens and potential internal challengers.

**How Repression is received:**

Consider the story I presented in the previous section, in which states decide if and whom to repress based on the level of threat they perceive. This treats the civilian population as essentially static: a group of individuals who pose a set level of threat based on the composition of the population, preexisting dissent, or any number of other traits. The state then chooses whether to repress the population based on how threatened the state feels and how successful the state expects repression to be. In practice, however, the citizens of a population are a conglomerate of people and groups that make choices of their own depending on both their own desires as well as the environment in which they operate. As such, while the state might see a population as posing a certain level of threat, that threat is only realized if members of the citizenry decide to act. Repression and dissent are strategic and interrelated, meaning that states decide to repress based on their perceptions of how the population will respond, while the population acts based on how they believe the government will respond (\cite{Pierskalla2010,Ritter2014a,Shadmehr2022a}). As the state can not know what the population is thinking, and vice-versa, all involved must rely on what they observe to gather information (\cite{Wintrobe1998}).

The state's population comprises the primary audience of repression. And the population's reaction to the repression determines whether folks will be more likely to uphold the status quo or to take action, thus fulfilling the feared threat. When a state represses some of its population, there are almost always others who observe the repression. The exception to this, of course, being in cases of covert repressive acts. This can be either good or bad from the states perspective. If onlookers witness repression and take it as a demonstration of the state's ability and strength, they might be less inclined to intensify their behavior. However, if they observe the state's use of repression and are angry or unhappy with what they see, that may intensify preexisting grievances they have with the state, making them more likely to escalate their dissent (\cite{McLauchlin2012a}).

Much ink has been spilled by human rights scholars regarding how successful or unsuccessful repressive regimes are at silencing opposition. How the repressed react to state repression depends on what practices are being targeted (\cite{Bloom2020a}) and the general context in which the repression is received (\cite{Ferrara2003a}). The literature is conflicted regarding how repression affects dissent, leaving most of the discussion to center around the context and structure of the state (\cite{Siegel2011a}) as well as the identities of those who are repressed.

How the population reacts to repression is also shaped by \textbf{who} is being repressed. Targets of repression naturally would like to escape or end that situation through whatever means they have available to them. While one such way of doing so might be to align with the government (the government's desired response), the repressed can also choose to leave, radicalize, or rebel. Physically leaving the state to escape repression requires significant resources, something that is not available to socioeconomically disadvantaged populations. As such, if the state targets elites or middle class citizens with repression, they may respond by fleeing the state, while disadvantaged persons may see their only option as escalating their opposition (\cite{Combes2011a}).

Experiencing repression has a profound effect on a state’s population, particularly those who are the targets of the repression. Existing literature in political psychology has explored how repression shapes the self and group identification of its targets. Individuals or groups that are collectively targeted by repression are more likely to form bonds and rearrange their group identification to be more closely aligned with one another. This strengthens existing bonds within the repressed group and weakens past divisions. Conversely, when one group is subject to targeted repression and another is not, this can result in increased polarization ( \cite[p. 292]{Nugent2020}). The response of the population to repression is also influenced by \textbf{where} the repression occurs. This is because the location of repression impacts who and how many are bystanders to the state's actions. For example, repression of protests in rural areas are less likely to result in backlash due to the lower number of bystanders and the distance between the repressed and the greater mass of the population (\cite{Christensen2018a}).

In the context of states attempting to prevent or remove internal challengers in a state making sense, we can take this information together to make a few statements. First is that when there are actors within a state's population that would be willing to seize power and emerge as a significant internal challenger to the state, we can assume that the group wants things from the state that are not currently received. These could be representation, fair treatment, opportunities, territory, etc. Some of these actors may already be attempting to secure these changes through traditional channels such as voting, advocacy, seeking office, mobilization, etc. When the state engages in repression, it makes these traditional channels of pursuing the person or group's interests less viable. As repression increases and the potential dissidents lose access to legitimate (in the eyes of the state) avenues to pursuing their aims, potential dissidents are forced to decide between giving up and acquiescing to the state's demands or escalating their behavior.

One example of this is Burma in the late '80s. In 1988, the military regime of Burma faced a massive uprising among its population. The government responded with brutal coercion, but that was not successful initially. As the weeks went on, the state continued to crack down on the dissidents while also completely suspending the social order, forcing citizens to live in a state of essentially anarchy. Most of the citizens chose to concede to the state's demands in order to restore some sense of order. Some prominent dissidents among that group did go on to organize political parties in order to challenge the regime. However, nearly 10,000 dissidents instead chose to flee to border regions of the state that were under guerrilla control (\cite[p. 315]{Ferrara2003a}).

When a state uses high levels of repression, it essentially communicates that it is unwilling to allow change or dissent within the current government system. As this continues, potential dissidents have to choose whether to concede and stop pushing for these changes or to escalate their actions. This leads me to Hypothesis 1B:

**\textbf{Hypothesis 1B**}: States that heavily repress their civilians will be more likely to face domestic challengers to the state.

So, if repression can backfire on the state and lead to more opposition rather than less, why does the state not use another form of contender prevention such as negotiation? By negotiating with smaller or weaker organizations such as those that might emerge as internal challengers to the state's authority, the state can accidentally legitimize the group or delegitimize the state (\cite{Asal2019a}). By offering concessions to the opposition, the state demonstrates that the group is significant enough both in identity and in threat to merit costly concessions. Such action can also signal to potential dissidents that the state is unwilling or unable to confront the group directly. It follows that either of these perceptions could lead to additional opposition from groups seeking concessions or wanting to take on the state more directly through conflict or seizure of territory.

So now we have looked at how repression is perceived by the state and by potential challengers among the population, but what happens when there are active and severe challengers to the state such as rebel movements or territorial contenders? In this situation, the state is now faced with two separate audiences, both with potentially different behaviors - potential challengers in the population and active challengers. While in the previous section I described how repression can deepen existing fault lines and push some potential challengers towards action, existing challengers have already made the jump to action. They already hold territory or are in conflict with the state. \citet{LemkeKarstens2022} show that a state's behavior towards territorial contenders within the state's borders can have lasting effects on the likelihood of additional challengers emerging. They show that peaceful toleration, fighting, and negotiations all increase the likelihood of facing additional challengers, while violently eliminating the challenger is insignificant. Given that territorial contenders are highly correlated with state failure, this leaves states in a difficult position. If they remove the territorial contender through the use of violent repression, they will stop the ongoing damage caused by that challenger. However, in doing so, the state's use of violence against the challenger may serve to motivate some among the population to mobilize themselves. This could possibly be avoided if the state is successful in framing its actions toward the existing challenger as a legitimate use of force (\cite{Bellamy2012a}).

**The International Community**

Repression and state actions do not exist in a vacuum. States that engage in repression can face sanctions, shaming, and financial or diplomatic repercussions from international organizations and other states. For the purposes of this article, I do not specifically address the effect of the international community, watchdog organizations, foreign aid, etc. on the use of state repression or the emergence of territorial contenders. This is not to say that such factors are unimportant in shaping a state's decision to use repression. Human rights criticism can, in some cases, decrease the use of repression (\cite{Franklin2008a}). That said, domestic traits of the state generally outweigh international factors such as trade or treaties in influencing a state's decision to repress (\cite{DavenportInman2012a}). Human rights treaties and the judiciary are sometimes ineffective in discouraging human rights abuses, particularly in cases where the leader of the state is very insecure or at risk of losing power (\cite{Conrad2013c}.

**Research Design**

The relationship between states and potential territorial contenders that I have described above is complex, incorporating many actors with diverse aims. My hypotheses center around how behaviors of the state influence the likelihood of territorial contenders emerging within a state. As such, to evaluate these hypotheses I need data regarding when territorial contenders emerge and how the state is behaving towards its population. I will address each in turn.

**Internal Challengers to the State – Territorial Contenders**

The first of these components - namely the emergence of internal challengers - I address using country-year data on territorial contenders from \citet{Lemke2020c}. Territorial contenders, as defined by the authors of the data set, are non-state actors that control territory within a sovereign state. Examples of territorial contenders that may be familiar to a general audience include the Palestinians in Israel, the Khmer Rouge in Cambodia, and the Viet Kong in Vietnam. These groups threaten official states by taking control of territory, monopolizing state resources, preventing the collection of taxes, and often sparking armed conflict. States in which territorial contenders emerge are significantly more likely to experience total state failure or bouts of civil war (Lemke and Crabtree 2020). This broad categorization includes a wide variety of challengers to the state including groups that actively fight the state, groups that call for permanent secession, groups that exist for only a short period of time, groups that do not engage with the state much at all, and so on.

I operationalize the emergence of internal challengers to the state as the emergence of a territorial contender. Lemke and Crabtree's \citeyear{Lemke2020c} Territorial Contenders in World Politics data set includes country-year data on all historical territorial contenders in the data. For the purpose of this analysis, I make use of the number of active TCs in the sovereign state in a given year as my primary data source. This provides information not only on when challengers to the state emerge but also on how many have emerged and how many persist. I explain how these data are used later when describing my modeling choices. A drawback of the territorial contenders (TC) data is that it is only gathered for a representative sample of 62 developing states. though this does limit my analysis to only this sample of countries\footnote{A full list of included states and all territorial contenders in that state's history, see Appendix 1.}, I am not concerned about the sampled countries harming my empirical analysis. Given that it is likely that territorial contenders are more prevalent in developing states and that the sampled states provide significant variety among various descriptive indicators, I do not believe this biases my analyses or harms the conclusions I draw. For each included state, data are gathered on every year starting with the state's independence and continuing through 2010, resulting in a long time period for each. Additionally, the 62 states selected for the data set are entirely representative of the developing world (\cite{Lemke2020c}). Finally, developing states are more fragile and prone to failure, meaning that states are likely to feel more threatened by opposition, increasing the likelihood of repression.

By using territorial contenders as a concrete indicator that a legitimate threat to the state has not been prevented, I offer my hypotheses a relatively conservative test. Territorial contenders are a significant threat to the state in that they have control of territory within the state and are highly correlated with increased state fragility (\cite{KarstensLemkeFragile}). As such, If a state uses repression and has TCs emerge, that is clear evidence suggesting that any attempt at deterring opposition was unsuccessful. Ideally, this analysis would start with a sample of all potential territorial contenders and data on not only all episodes of state repression but also information on the targets of said violence. Unfortunately, these data are not available or possible to gather without monumental time resources. Territorial contenders emerge from a variety of different backgrounds, making it near impossible to identify every subset of a state's population that could potentially take control of territory. However, given my previous discussion regarding the audiences of repression, it is reasonable to say that the state need not directly repress the potential TC to affect the potential members of that TC through repression.

While my primary analyses use state-level data on territorial contenders, I am also interested in how repression affects the longevity of TCs once they emerge. It is possible that while repression may increase the likelihood of TCs emerging from among the population, the use of repression against existing challengers decreases their longevity. This could be due to repression denying the TC resources, removing leadership, increasing the costs of resistance, etc. In order to test this possibility, I require data on each individual TC. Thankfully \citet{Lemke2020c} also provide TC-year data on every actor in the data set. This includes yearly observations starting when the TC emerged and ending when it dissolves.

**Measuring Human Rights**

In order to capture how states treat their citizens, I use the human rights protection (hrp) scores originally created by Chris Fariss as my primary independent variable (\cite{hrpscores}). These hrp scores are a continuous indicator of the level of respect for human rights in a given country-year generated using a complex latent variable model. While there are a number of excellent sources of data regarding the state of human rights throughout the world, the hrp scores incorporate much of that information in a format that is more amenable to quantitative analyses. Table ~\ref{tab:hrp-sources} lists all the components included in the hrp scores.\footnote{This information is for the latest version of the hrp data set, as updated in \citet{hrpscores}. This is version 4 of the data set. Version 4 expands the data through 2019, incorporates one-sided event count variables, and generates estimated latent event counts.} Using a latent variable, measurement model and the indicators shown in ~\ref{tab:hrp-sources}, the model generates a distribution of estimates for the state's level of respect for human rights. The data set reports the mean and standard error of this posterior distribution. In practice, the mean value is used as the state’s human rights protection score. Low values of the indicator represent states with significant human rights violations while high values indicate greater respect for human rights. \citet{hrpappx} provides detailed information regarding the construction and constituent components of this indicator as well as guidelines for its use.

Important to note is that the human rights protection scores are essentially a measure of state respect for physical integrity rights rather than repression generally, as is shown in ~\ref{tab:hrp-sources} by the types of variables included in the measure. While violations of physical integrity rights such as killings are highly visible and severe, they are not the only repressive actions a state can take. As I discuss above, non-violent forms of repression like uneven policing, biased courts, and restriction of civil liberties, can hinder the organization of challengers to the state. As the hrp scores do not incorporate such measures, it means that this score is likely under-reporting the level of repression used by the state, which will bias my results against finding significance.

TABLE

For the purposes of my analysis, I treat the posterior mean score of the hrp model as a country-year indicator of state respect for human rights. This is appropriate and does not bias my findings when used as the dependent variable, given that any error surrounding the estimate can be accounted for by the error term of the model. However, when used as an independent variable on the right-hand side of the model, latent scores such as this require additional treatment in order to account for the uncertainty surrounding the estimate (\cite{hrpappx}). In models where I use the human rights protection scores as an independent variable, I account for this uncertainty by using a simulation approach, much like one would use for instances of multiply imputed data (\cite{King2001}).

Best practices for handling situations such as this are fully explained by \citet{Mislevy1991} and \citet{FarissSchnak2013}, though I briefly explain the procedure as I applied it here. Using the mean and standard error of the posterior estimates provided by \citet{hrpscores} for each country-year, I took a random draw for the entry. I then saved this set of simulated human rights protection scores as a new variable. I repeated this procedure five times, resulting in five simulated sets of human rights protection scores.\footnote{These simulated sets of data can be found in the replication files for this article.} When estimating my models, I estimate each five times, each with a different set of hrp scores, saving the model results for each iteration. While the other variables in the model were not simulated, due to the effect of the hrp variable on all coefficient estimates in the model, each model resulted in different coefficients and standard errors for all variables. After completing all five runs, I combine the results in accordance with best practices. The reported coefficient estimate is the mean of all five estimated models. The standard error is calculated using Donald B. Rubin's \citeyear{Rubin1987} formula, listed below in equation 3.1.

In this formula, $s^2\_{k}$ represents the squared standard error for simulation $k$, $m$ represents the number of total simulations (5 in this case), and $\sigma^2\_{\beta}$ represents the variance in coefficient estimates between simulations. Essentially, this distills down to the average standard error plus the variance in the coefficient estimates multiplied by a correction term to account for the simulated nature of the data. Using these calculated coefficients and standard errors, I am then able to calculate the remaining statistics reported in my results section. \footnote{Those interested in seeing the raw results of each of these constituent runs can find those results in the replication files for this analysis, available online or upon request.}

**Unit of Analysis and Temporal Range**

The unit of analysis for most of this study is the country-year. For my final model, I use the TC-year as my unit of analysis instead. I use the random sample of developing states used by Lemke and Crabtree (\citeyear{Lemke2020c}), which limits my analysis to only developing states. Given that the territorial contenders data are only available through 2010 and the data I use as my measure of human rights (\cite{hrpscores}) is available for 1946 onwards, the temporal range of this study is 1946-2010. This temporal range is further limited in some models by the availability of the control variables.

**Control Variables**

In order to account for potential confounders in the relationship between state repression and the emergence of internal challengers to the state, I include several control variables suggested by the literature. These are the state's regime type, state capacity, area, mountainous terrain, ethnic and linguistic fractionalization, and ongoing inter and intrastate conflict. I will address each of these in turn.

Arguably the most important control variable to include in this analysis is the regime type of the state. The relationship between democracy and repression has been written about at length (e.g. \cite{Fein1995,Davenport1995a,Davenport2007b,Davenport2004d,DavenportArmstrong2004,Davenport1999} just to name a small portion of the literature on this topic). Democratic states are less likely to use repression. Additionally, it is probable that democracies are less likely to experience territorial contenders in general as there are more legitimate political avenues potential dissidents can take within the government system to achieve their aims. As such, I include an indicator of the state's regime type as a control in each of my analyses. To measure how democratic the state is, I primarily use the Polity5 data from the Systemic Center for Peace (\cite{polity5}). Specifically, I use the composite measure of democracy labeled polity2, commonly referred to as the polity score. This is a composite metric of democracy that is widely used in political science as an indicator of democracy. Low scores indicate more autocratic regimes while high scores indicate a more democratic regime. This measure is not without its flaws, however. The Polity score is made up of a variety of components that are scored and weighted to make up the final polity score. Among these components are indicators of conflict, meaning that states that repress their populations may have lower polity scores due to that repression(\cite{Jones}). Given this possibility, I also make use of the Varieties of Democracy (V-Dem) Project's polyarchy and electoral democracy indices as robustness checks (\cite{Coppedge2021a}). The V-Dem indices are also composite democracy scores but they include different constituent components, most notably excluding conflict indicators.\footnote{One might be wondering why I do not use the V-Dem scores in my primary analysis. The reason is for comparison's sake. Most of the existing studies on the relationship between democracy and repression use the Polity score as the indicator of democracy. To facilitate communication between this work and the existing literature, I chose to use the less used V-Dem indicators as robustness checks rather than as my primary results.}

The next important control variable I include in my analysis is state capacity. \citet{Daly2014a} argues that the level of territorial threat posed by a group is not as important as is the state's repressive capacity in determining whether the group is targeted by repression.\footnote{Daly (2014) illustrates this using variation in the Soviet Bloc as well as a measure of repressive capacity consisting of the ratio of armed personnel to ethnic group members. } Additionally, capacity can be used as a rough indicator of how strong the state is (\cite{KarstensLemkeFragile}). States that lack capacity may be less able to engage in widespread repressive strategies due to a lack of resources. Additionally, potential challengers may see a lower capacity state as less threatening, making the emergence of TCs more likely. Measuring state capacity is a bear of a task due to its complex nature. Capacity consists of many components such as the state's bureaucratic efficacy, military strength, economy size, level of taxation, etc. As such, I use Hanson and Sigman's (\citeyear{HansonSigman2021}) composite indicator of state capacity as a control in my analysis. The Hanson and Sigman capacity score is estimated using a latent variable model much in the same way as the human rights protection scores. Using a Bayesian Markov-Chain Monte Carlo (MCMC) latent variable model and 21 indicators of state capacity, Hanson and Sigman generate a numerical score indicating the state's level of capacity in a given country-year. There is a significant drawback to the use of this control, however.

The Hanson and Sigman scores are available for only 1960 onwards, which leads to me dropping the first 14 years of my data for states that are available starting in 1946. While I believe that this loss of temporal coverage is worth the gain in measurement sophistication, I include an alternative in the appendix. In this alternative analysis, I use Bremer’s (\citeyear{Bremer1992}) measure of state development based on the composite indicator of national capabilities from the Correlates of War (COW) project as a control for capacity. Bremer's measure consists of the ratio of the state's economic components (energy consumption and iron/steel production) divided by its demographic components (total population and urban population). This is a rougher measure of capacity and only correlates with the Hanson and Sigman scores for the countries in our analysis at a rate of 0.44, hence why I prefer to use the Hanson and Sigman scores in the primary results.

The next three controls I include concern the physical and demographic traits of the state. The first is the area of the state, as reported by C-Shapes. Larger states by definition have more territory over which the state must exercise its control. It is possible that TCs are more likely to emerge when they can seize territory in more remote and difficult-to-reach regions of the state. Similarly, states with more mountainous terrain pose difficulties for enforcement as well. Rough terrain makes it difficult for state officials to reach certain parts of the territory, which might make TC emergence more likely. To control for this, I include a measure of mountainous terrain as reported by \citet{Fearon2003b}. Finally, potential TCs can emerge from existing grievances and fault lines within a state. As such, I use the measure of ethnolinguistic fractionalization suggested by \citet{Fearon2003c} to account for pre-existing divides caused by state diversity.

My final two control variables concern the state's involvement in interstate and intrastate war. The context of conflict in and around the state can shape the state's use of preemptive or direct repression (\cite{Danneman2014}). Additionally, states which are in direct conflict with rebel groups may be more likely to use repressive strategies such as mass killing of civilians or other violations of bodily integrity rights as a way of "draining the sea" of resources on which the rebel group relies (\cite{Valentino2004,Valentino2004book}). Some TCs also fight the state, making them both TCs and rebel groups involved in intrastate conflict. In order to control for existing inter or intrastate conflict, I use data from UCDP's Armed Conflict Dataset (\cite{Gleditsch2002, Davies2022}). In my analyses, these are two binary control variables, one interstate conflict and one intrastate conflict, indicating whether the state is involved in that type of conflict in the given year.

**Are States That Repress Their Civilians More or Less Likely to Experience Territorial Contenders?**

My two hypotheses concern whether state repression increases or decreases the likelihood of TC emergence. To test these hypotheses, I leverage a duration modeling approach. A duration modeling approach is ideal for this case as such time-to-event approaches evaluate the effect of covariates on the hazard of TC emergence. I begin by examining how state repression influences the emergence of a state's first territorial contender. This is a useful analysis as it removes the possible confounding factor of other existing territorial contenders that whom the state may be in conflict.

To examine how human rights violations influence the risk of TC emergence in a state, I use a simple Cox Proportional Hazards model in which the primary dependent variable is the number of years since the state entered the dataset, and the primary independent variable is the state's level of protection for human rights in that year. In this initial model, states are dropped from the analysis once they experience their first territorial contender. A Cox proportional hazard model is a semi-parametric model in which the effect of predictors on the hazard of TC emergence is estimated by:

\begin{equation}

\lambda(t) = \lambda\_0(t) \text{exp}(X\_{it}\beta)

\end{equation}

where z is the vector of covariates available at time \textit{t}. Using this model, we can examine how the use of repression affects the likelihood of a state encountering its first territorial contender. In this analysis, states are removed from the data after experiencing their first TC. In hypothesis 1 is supported, we will see a positive and significant coefficient on human rights protection, meaning that states that repress their civilians are less likely to experience TCs. If hypothesis 2 is supported, we will see a negative and significant coefficient on human rights protection, meaning that states that repress their civilians are more likely to have TCs emerge. Figure ~\ref{fig:tc1} displays the Cox model coefficient estimates for the first territorial contender in a state, along with the p$<$0.05 and p$<$0.1 confidence intervals.

\begin{figure}

\caption{Cox Model of First TC}

\label{fig:tc1}

\centering

\includegraphics[width=0.7\textwidth]{C3-Warning Shots/First TC Coef Plot.png}\\

\end{figure}

The results of the Cox proportional hazard model show that states with less respect for human rights are more likely to experience TCs. This finding is in line with hypothesis 2. State capacity is also correlated with a decreased risk of territorial contenders emerging, meaning that high-capacity states are less likely to experience the emergence of TCs. The lack of significance on the other control variables is largely not surprising. Given that states are removed from the analysis when they encounter their first territorial contender, states that are facing territorial rebel groups are dropped before intrastate war has an effect. Interstate war is uncommon in the dataset, so its lack of significance is unsurprising. Taken together, the results of Figure ~\ref{fig:tc1} support the idea that state use of repression pushes potential dissidents towards seizing territory.

However, many states encounter more than one territorial contender throughout their time in the dataset. This means that rather than the time to event model reported above, the full process is better conceptualized as an event history process where the state can experience repeated failure (meaning TC emergence) events. This is best evaluated using a repeat failure estimator (\cite{Box-Steffensmeier2002d}). Repeat failure models have many applications in academia and science more broadly. Initially, they were put forward as a way of studying medical events such as hospitalization or tumor recurrence in cancer patients (\cite{Amorim2015a,Andersen1982a,Box-Steffensmeier2006b,Prentice1981a,Wei1989a}). Over the years, this has resulted in a number of different approaches and estimators for testing repeat event processes. Most of these are extensions of the Cox proportional hazard model I used above to evaluate a state's risk of experiencing its first TC. These extensions work by correcting for the lack of independence between events. This is done either by variance correction, in which the Cox model is estimated and then the variance-covariance matrix is adjusted accordingly, or through the inclusion of a frailty term in the hazard ()\cite{Box-Steffensmeier2006b,Box-Steffensmeier2007b,Box-Steffensmeier2004b,Box-Steffensmeier2014a}.\footnote{The appendix for chapter 4 includes extension description of each of these modeling approaches.} These approaches all have their strengths and weaknesses when it comes to ease of estimation, underlying assumptions, and interpretability.

To provide my analyses a rigorous test, I evaluated my models using both variance correction and frailty term approaches, though I report only the variance correction results in the main text. Given the structure of my data and the nature of TC emergence, I use a conditional interevent time model (PWP Gap Time) model for my full analysis (\citet{Prentice1981a}). This is a variance correction extension of the Cox proportional hazard model in which the correction of the variance-covariance matrix is adjusted to account for the temporal dependence of the TC emergence events. As the name of the model implies, this model uses gap time, or the number of years since the last TC emergence, as the time variable. By modeling the time between events rather than the time since the state first enters the dataset, the model assumes that the state is sequentially at risk for each TC emergence. The risk set for time t for the kth TC emergence is limited to only states that have already experienced their k-1th TC. The hazard function for this model is given as:

\begin{equation}

\lambda(t|N(t), Z(t)) = \lambda\_{0s}(t-t\_{n(t)})exp(z(t)\beta\_s)

\end{equation}

In this hazard function, t represents the time, s represents which event the state is currently at risk for, $\beta$ represents the stratum-specific coefficients, and z represents the vector of covariates present at time t. This hazard function allows for the baseline hazard to vary for each subsequent event. In line with my earlier discussion, there is reason to believe that this pattern may not hold for subsequent territorial contenders. Particularly when there are active territorial contenders in the state, there are two audiences to the state's repressive acts - the general population from which additional challengers may emerge and the existing challengers. By allowing the baseline hazard to vary, we can look at how the relationship between the covariates and the risk of TC emergence changes as the state faces its second, third, or fourth TC.

Figure ~\ref{fig:tc1+} shows both the combined repeat-failure model coefficients as well as the TC iteration interactions.\footnote{As mentioned previously, there are several approaches to modeling repeat event processes. While I believe that either the PWP gap time model or a frailty model is most appropriate in this case, I present results for a frailty model, an Anderson-Gill (\citeyear{Andersen1982a}) unrestricted model, and a marginal risk set variance correction model (\cite{Wei1989a}) in the appendix as robustness checks. } The colored bars represent the coefficient estimates when only looking at the states at risk for that even. A table of these results can be found in the appendix. If hypothesis 1 is correct, we would expect to see a positive and significant coefficient for human rights protection, meaning that states that repress their civilians (thus respecting human rights less) are less likely to have TCs emerge. If hypothesis 2 is correct, we would expect to see the opposite, meaning that states that repress their civilians are more likely to experience TCs.

Looking at the results, I find strong support for hypothesis 2, meaning that the use of repression increases the hazard of TCs emerging. Interestingly, this ceases to be significant as the state faces its fourth and greater TC. This could be for a number of reasons. First, it could be that this lack of significance is due to the decreased number of states that reach their fourth TC. Only 17 out of the 61 states in my analysis are included in the 4+ TC interaction. This represents 486 state-years of data. This much smaller pool of data makes significance more difficult to reach. However, this could be a true finding rather than just a result of reduced sample size. By the time a state encounters its fourth territorial contender, there has been a pattern of groups challenging the state. The state's actions have not been successful in the past at deterring these groups - something that potential challengers have witnessed. Additionally, in many of these years, there are multiple active TCs within the state's borders, leaving less space and resources that could be seized by new territorial contenders. 47$\%$ of the state-years include in the 4+ TC analysis have 2 or more different TCs active within the state. 14$\%$ have five or more TCs active within the state, a truly staggering number of non-state actors to be actively controlling territory at one time. This would suggest that the relevance of the state's actions in deterring or addressing territorial contenders is diluted as the number of territorial contenders increases.

**Does Repression Prevent Territorial Contenders?**

While these models demonstrate a correlation between state repression and the emergence of territorial contenders, they do not grant much purchase on the causal ordering of this relationship. Do states repress their populations as a way of preventing the emergence of challengers, meaning that the repression comes first? Or is it that states repress their population in response to threats that have already emerged?

To suss out this endogeneity issue, I use a different modeling approach - a dynamic, multiple interrupted time series design and a panel data model with two-way fixed effects. As this is a rather lengthy name for a modeling strategy and one that is not commonly used in International Relations research, I will break down what it consists of piece by piece.

Interrupted time series (ITS) research designs are a quasi-experimental approach in which interruptions, in this case the emergence of TCs, are seen as akin to an experimental treatment. By examining the slope of the relationship between a given covariate and the dependent variable both before the interruption and after, ITS designs compare the two slopes to see if there was a meaningful change. This is done in practice using segmented regression, where one regression model is fit on the data leading up to the intervention and a second is fit to the data after. The results are then compared to evaluate whether there was a statistically significant change. In the case of my analysis, as many states experience more than one TC over their history, the analysis is segmented for each new interruption, resulting in a multiple interrupted time series (MITS) design. While ITS and MITS are often spoken of as quasi-experimental, they do not come with the random assignment and control that accompanies a purely experimental approach. That said, the nature of this study, namely how repression affects the likelihood of domestic challengers seizing control of territory, is both unethical and impossible to study in a controlled experimental setting. An ITS approach is robust enough to handle these country-level data in a way that addresses causality more directly than traditional correlational models (\cite{Cruz2017}).\footnote{As a researcher who specializes in statistical modeling, I do not have any issue with commonly used correlational models, as is evidenced by my presentation of the PWP gap time model earlier in this paper. All modeling strategies have trade-offs regarding their use.}

Just as one must specify the treatment, outcome, and control variables in an experiment, I specify the treatment, dependent variable, and controls here. The dependent variable is the human rights protection score for the state year (\cite{hrpscores}). The controls are the same as in the repeat failure model, though I exclude ELF in the reported results due to a lack of variation. I present the model results with ELF included in the appendix. For the treatment variable, I use the number of active TCs within the state. This acts as a sort of ``goldilocks'' solution to modeling TCs. This variable takes a value of zero, meaning no treatment, for years in which no TCs are active in the state. When there are active TCs, the treatment takes a value of 1 or greater in accordance with the number of TCs. This causes the treatment variable to incorporate information not only on whether the state is facing a territorial contender but the magnitude of the threat. I say this is a ``goldilocks'' solution as it falls between the other possible operationalizations.\footnote{I present results for both described alternative strategies in the appendix.}

One alternative I considered was to use a running counter of the total TCs the state had faced up until a given year as the treatment variable. As that would not decrease when a TC dissolved or ``died'', such an approach assumes that the emergence of a TC has a permanent effect on the state. If this were the case, the model results would display how having a history of TCs affects the state's likelihood to use repression. A much sparser approach would be to use the initial emergence of TCs as the treatment. This would consist of coding a value of ``1'' for the treatment in years where a new TC emerged and ``0'' for all others. This approach essentially assumes that the treatment that influences state use of repression is not the \textbf{presence} of TCs but instead the emergence of new TCs. While there are arguments to be made for these approaches, the ``goldilocks'' measure of the number of active TCs I believe is the closest approximation of the process I have described.

As I have mentioned, a multiple interrupted time series (MITS) approach compares the difference in the relationship between TCs and state repression before and after the TC emerges. However, readers may wonder how this is possible in states where many TCs are active at once. When there are not enough years in between interruptions, it is difficult to identify the effect of any one interruption. As such, the model results will reflect the general effect of the covariate on the DV rather than the quasi-experimental effect. As such, in order to benefit from the causal purchase a MITS approach grants, best practice is to ensure there are eight observations before and eight after each treatment (\cite{Penfold2013}). This is not to say that results from a model with more frequent interruptions are invalid or biased. Insufficient gaps between interventions affect the robustness of the causal leverage given by the model but do not result in worthless results (\cite{Ye2019}). I present results for both the full sample of countries as well as a subset of only states with 8 years or more between TC events. In my results, I refer to this set of reduced cases as the "subset". These states tend to be more stable (\cite{KarstensLemkeFragile}) and thus less likely to use repression, which makes this a conservative test.

For the regression component of the model, I use a linear maximum likelihood panel data model with two-way fixed effects (\cite{Croissant2008}). Two-way fixed effects refers to the use of both time and state fixed effects in the model. These terms help account for unobserved state and year confounding variables without needing to include them in the list of named controls (\cite{Kropko2020}).\footnote{Two-way fixed effects, while increasingly popular, are often overused in ways that harm the validity of a models causal claims (\cite{Imai2021}). While I assert that they are used correctly in this context, I also report results with unit effects only in the appendix.}

In order to make the model a \textbf{dynamic} MITS design, I include a lagged indicator of the state's human rights protections. As I described in my research design, the use of a lagged indicator of human rights protection requires additional care. As the hrp scores are actually the latent mean of the measurement model's posterior distribution, I followed best practices and simulated 5 random draws given the mean and standard error for each country year in the data. I then estimated the interrupted time series model once for each of the 5 simulated datasets. Using the procedures previously described, I then calculated the combined coefficients, standard errors, and p-values reported in ~\ref{fig:wsits}.\footnote{Tabled results can be found in the appendix.}

Figure ~\ref{fig:wsits} presents the combined coefficient estimates with accompanying 90 and 95\% confidence intervals for my MITS analysis. The dark blue lines represent the results for the full set of cases while the green represents the results for just the subset of cases where there are gaps between TC emergences.\footnote{If viewing these results in grayscale, the dark line is the full sample while the lighter line is the subset.} These results show that the number of TCs active in the state increases a state's abuses of human rights. This is significant both for the full model\footnote{Recall that given the lack of sufficient space between events, this coefficient estimate is more a representation of the general effect of TCs on repression rather than the quasi-experimental finding shown in the subset.} as well as for the subset.

These results show that, controlling for all listed confounders as well as time and state fixed effects, states are more likely to use repression when there are more active territorial contenders. This supports the expectations of my first hypothesis. Interestingly, the magnitude of this effect is considerably larger than in the full sample. A quick note regarding the control variables in this model. I find that states engaged in civil war are less likely to respect human rights and high-capacity states are more likely to respect human rights. These are in line with previous findings. Regime type and state area are not significant in this model, although given that these do not vary widely over a state's history and I include fixed effects in the model, this is unsurprising. In each of these cases, the magnitude of the effect is stronger in the subset. Given that the subset conforms well to the assumptions of the quasi-experimental MITS approach, this strongly supports the assertion that states facing territorial contenders are more repressive, even when accounting for their level of repression in the previous year.

**Conclusions**:

The findings I have presented thus far paint an intriguing picture. States that repress their civilians are more likely to get territorial contenders and thus face the negative effects TCs bring with them, but the presence of territorial contenders encourages the state to engage in more repressive behavior. On its face, this is a puzzling, self-reinforcing spiral that does not bode well for states in this situation. Are states that get territorial contenders doomed to a spiral of continued opposition, fragility, repression, and potential failure?

I, unfortunately, do not have an answer to this question. Missing from this analysis is information on the repression itself. Namely who is being repressed, where the repression takes place, and how the repression is enacted. Remember from my earlier discussion about what factors influence the decision to repress and the response of the repressed. A significant portion of the literature is devoted to the conflict-repression nexus, examining how a state's use of repression influences a variety of behaviors such as protest or rebellion. Much of that looks at the repression of those doing the protest or directly engaging in conflict with the state. While the human rights protection scores are great data, as are many of the more specific indicators that go into the latent measure, they do not tell us whose human rights are being protected by the state, just whether the state is generally respectful of human rights.

In order to better study this puzzle, I would need data on the human rights violations themselves and who among the population is targeted by the repressive acts. While there are data available on repression, they are often not collected with the study of state making in mind and thus are not coded with regard to the targeting of specific non-state actors.\footnote{There are some exceptions to this, particularly with regards to secessionist movements, but those data lack the breadth and inclusivity of non-secessionist movement groups that I require. } Most people (including myself) view violations of human rights as terrible tragedies that should be prevented. However, central to providing effective recommendations or strategies for preventing or addressing human rights atrocities is understanding the underlying motivations for such actions. What are states seeking to get out of their repressive acts? Who is their audience? And why use repression instead of more peaceful methods? While additional data and further study are required to unpack how territorial challengers shape state incentives to repress, this article offers a first look at how this interaction plays out and hopefully lays the groundwork for future research.