

# The Temporal Logic of Repression in China: A Political Calendar Approach

[This version: January 19, 2016]

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## Abstract

Why and when do we observe government crackdowns on political dissidents? This paper argues that detentions exhibit predictable, often cyclical patterns that correspond with a country’s “political calendar”—the national events that dictate the rhythm of political and social life. An analysis of dissident detentions in China from 1998 to 2014 shows that evidence that the CCP regime anticipates dates that heighten in the mobilization potential of the population. Detentions coincide with the five-year anniversaries of the Tiananmen Square massacre and founding of the People’s Republic of China, as well as high-level regime meetings. These “coordination events” alone are responsible for about 20% of dissident detentions over this period.

Repression, detention, dissidents, authoritarianism, collective action, political opportunity, human rights, China, political calendar approach

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## Introduction

Repressive crackdowns are ubiquitous in authoritarian systems. The Cuban government imprisoned 75 dissidents on grounds of espionage in the “Black Spring” of 2003. Their modal sentence was 20 years in prison (Lauria et al. 2008). In November 2012, Bahrain’s Sunni monarchy revoked the citizenship of 31 political activists and opposition members, including some members of parliament (Fahim 2012). In 2013, thirteen peaceful Catholic activists in Vietnam received heavy prison sentences on charges of undertaking “activities aimed at overthrowing” the government. They were purportedly involved with Viet Tan, an overseas reformist group (“Vietnam: Release” 2013).

An extensive cross-national literature explains repression as a function of structural factors. The standard approach is to regress indices of human rights abuses on a set of country-level covariates. Respect for human rights proves positively associated with democracy (Poe & Tate 2004; Davenport & Armstrong 2004; Bueno de Mesquita et al. 2005; Davenport 2007b); certain domestic legal institutions (Cross 1999; Davenport 1996; Keith, Tate & Poe 2009; Mitchell, Ring & Spellman 2013; Powell & Staton 2009; Cingranelli & Filippov 2010); the absence of “youth bulges” in the population (Nordas & Davenport 2013); and NGO/INGO presence (Franklin 2008; Hafner-Burton 2008; Hafner-Burton & Tsutsui 2005; Murdie & Davis 2012), among other factors (Hill & Jones 2014).<sup>1</sup> The effects of international forces, like preferential trade agreements (Hafner-Burton 2005), “naming and shaming” (Hafner-Burton 2008; Franklin 2008; Murdie & Davis 2012), and UN treaty ratification (Hathaway 2002; Hill 2010; Keith 1999; Neumayer 2005; Simmons 2009) prove more muddled, although there is evidence that global respect for human rights has increased with the rise of these

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<sup>1</sup>See Hill & Jones (2014) for an excellent review of this literature

institutions (Fariss 2014).

These theories do well to explain differences in repression levels across countries, but they fail to explain wide swings in detentions and other human rights abuses that occur within countries in short periods of time.<sup>2</sup> Why and when do we observe crackdowns on political dissidents? More broadly, what drives governments to commit human rights abuses when they do?

This paper develops and tests a theory that explains temporal variation in repression as a function of a country’s political calendar. We know that shifts in the “political opportunity structure” have the capacity to produce social movements, as dissidents seek out and exploit these openings to mobilize the broader population (Beissinger 2002; Eisinger 1973; Kuran 1991; Tilly 1978, 1995; Tarrow 2011; Tilly & Tarrow 2007; McAdam et al. 2001). The core argument here is that regimes can anticipate the “coordination events” that create these openings, and engage in pre-emptive repression to survive their passing. These predictable, often cyclical detention patterns are punctuated by unanticipated shifts to the opportunity structure—specifically governance shocks, leadership splits, or foreign revolutions. In these instances, the regime engages in reactive repression.

A unique event-level dataset of political prisoners in China to test these ideas. The Congressional-Executive Commission on China (CECC) maintains a Political Prisoner Database (PPD) that contains a list of known individuals that have been detained in China for political

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<sup>2</sup>This may be in part because of data limitations. The two common measures the CIRC “Physical Integrity Index” (Cingranelli & Richards 1999, 2010) and the “Political Terror Scale” (PTS) (Gibney et al. 2009; Wood & Gibney 2010)—use Amnesty International and U.S. State Department reports of political imprisonment, torture, executions, etc. to create ordinal measures of repression. These indices, while a major contribution in themselves, lack precision because they are aggregated to the country-year and rely on relatively crude standards-based scales (Davenport 2007a). On the PTS, China has earned a rating of “4 - Civil and political rights violations have expanded to large numbers of the population” every year since 2000, despite substantial variation in documented detentions and other abuses during this period.

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reasons. This data was cleaned and augmented to create an index of monthly “democracy related” detentions, which allows us to see and explain temporal variation in government crackdowns. There were 220 publicly observable detentions of this type in total from 1998 through 2014. An interrupted time series analysis shows that repression is indeed a predictable function of anticipated coordination events. Detentions show cyclical patterns, coinciding with the five-year anniversaries of the Tiananmen Square Massacre and founding of the PRC, as well as high-level regime meetings. On average, a month that precedes or includes a coordination event increases the expected number of detentions by some 95%. The estimates suggest these events alone are responsible for about 20% of political dissident detentions in China over the analysis period.

Foreign revolutions and protests also drive detention patterns. On average, the effect of a month including or shortly following a foreign revolution is to increase the expected number of detentions by 70%, and these types of events are responsible for another 15% of detentions over the analysis period. Political mobilization in one authoritarian country appears to beget repression in others.

This paper aims to make empirical and theoretical contributions to existing research on human rights and authoritarian politics. It presents the first attempt to quantify and explain temporal variation in dissident detentions in China, joining other studies that take a micro-level approach to studying repression and human rights (Davenport 2005; Fielding and Shortland 2010; Francisco 1995, 1996; Moore 1995, 1998; Rasler 1996; Shellman 2006). China scholars have rightly devoted considerable attention to explaining the nature of petitions, protests, and other forms of collective action (see Perry 2002; O’Brien 1996; Hurst & O’Brien 2002; Cai 2004; O’Brien & Li 2005, 2006; Mertha 2008; Chen 2011), but the subfield has yet

to ask when and why the regime puts people behind bars. Exploring detention patterns can give us broader clues about the nature of regime stability for this crucial case.

Theoretically, the innovation is to explain temporal variation in repression as a function of a country’s “political calendar.” Many frameworks for understanding authoritarian politics implicitly acknowledge that events matter, as they can potentially unleash latent grievances in the population to produce collective action (Kuran 1991; Beissinger 2002; Boix 2003, Acemoglu & Robinson 2006, Svobik 2012; Tilly & Tarrow 2007; McAdam et al. 2001).<sup>3</sup> Nevertheless, events have yet to be seriously considered as a theoretical concept of interest in the human rights literature, nor has there been much empirical work that codes events as variables of interest (Beissinger 2002).<sup>4</sup> The analysis here shows that coordination and external mobilization events have significant explanatory power for predicting dissident detentions within China over time. This approach may have similar applicability to other authoritarian systems.

## Theory and Hypotheses

Existing research on human rights abuses focuses on the cost-benefit calculus of the regime. Factors that increase the net costs of repression—like international treaties (Hathaway 2002; Hill 2010; Keith 1999; Neumayer 2005; Simmons 2009), preferential trade agreements, muck-raking NGOs (Franklin 2008; Hafner-Burton 2008; Hafner-Burton & Tsutsui 2005; Murdie & Davis 2012) or democracy itself (Poe & Tate 2004; Davenport & Armstrong 2004; Bueno de Mesquita et al. 2005; Davenport 2007b)—are expected to reduce abuses.

<sup>3</sup>In the frameworks of Boix (2003), Acemoglu and Robinson (2006), or Svobik (2012), such moments correspond to instances where the exogenous probability of revolutionary success (often depicted  $\pi$ ) is high.

<sup>4</sup>Beissinger (2002) treatment of nationalist mobilization stands a notable example of event-based analysis, and it treats events both as effects and causes in and of themselves. Although his analysis focuses on large-scale protests, not repression per se, it also identifies a cyclical pattern to contention.

The purpose of this paper is to move beyond these structural factors, to develop intuitions about the temporal determinants of variation in human rights abuses. We know that repression is closely linked to the level of political dissent— Davenport goes as far as to dub this relationship the “The Law of Coercive Responsiveness.” (Davenport 2005, 2007; Fielding & Shortland 2010; Francisco 1995, 1996; Moore 1995, 1998; Rasler 1996; Shellman 2006; Davenport 2007). Thus, to understand detention patterns, we must understand how the political calendar relates to the supply of dissent.

Kuran’s (1991) classic informational cascades framework offers a helpful starting point. In Kuran’s (1991) model, each member  $i$  of society faces the decision of whether to support an authoritarian government or oppose it. The payoff of choosing to oppose the government increases with two factors: the individual’s personal antipathy towards the regime  $x_i$ , and the size of the public opposition  $S$ . In general, the larger the opposition  $S$ , the lower the personal risk of voicing opposition. This yields a revolutionary threshold  $R_i$  for each individual— the size of public opposition  $S$  at which she would join a revolution and openly oppose the government.<sup>5</sup> We can think of political dissidents as simply individuals with particularly low values of  $R_i$ .

The key insight in Kuran’s framework is that the revolutionary outcome in a given society depends on the distribution of these thresholds. He gives the example of the following “threshold sequence” in a ten-person society.

$$A = \{0, 20, 20, 30, 40, 50, 60, 70, 80, 100\}$$

Here, individual 1 ( $R^1 = 0$ ) will always voice opposition. This brings the level of public opposition up to  $S = 10$ , but no other individuals will join her, as their revolutionary thresholds

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<sup>5</sup>Kuran (1991) parameterizes this threshold as  $T_i$ , but I use  $R_i$  as the notation to avoid confusion with the time parameter in the empirical analysis.

### Box 1: Event Definitions

*coordination event* – an event known in advance that reduces the coordination costs of collective action, including anniversaries of key historical events, national commemorations or celebrations, or high-level regime meetings

*leadership transition event* – an event signaling the formal transition of power within the regime

*leadership division event* – an event signaling heightened division within the regime over issues of political reform; includes death/purge of key political reformers

*governance shock event* – an event signaling gross policy mismanagement or scandal

*external mobilization event* – an event involving mobilization for democracy/political reform occurring abroad

all exceed ten. Kuran (1991) calls this case a “latent bandwagon” – a slight shift downward in the thresholds would produce a revolution.

We can think of this distribution as being fluid over time, and as a function of the political calendar. There are moments in any authoritarian society that provide opportunities for opposition to overcome the collective action problem – what social movement theorists might call shifts in the “political opportunity structure” (Eisinger 1973; Tilly 1978, 1995; Tarrow 2011; Tilly & Tarrow 2007; McAdam, Tarrow & Tilly 2001). Key societal events might heighten antipathy towards the regime or signal reduced repressive capacity, which would shift the distribution of revolutionary thresholds  $f(R_i)$  leftward. I consider five types of events, which are defined in Box 1.

[Box 1 About Here]

This paper focuses on *coordination events*, dates known in advance that heighten the mobilization capacity of the population. These might include anniversaries of key historical

events, national commemorations or celebrations, high-level regime meetings, among others. In the Chinese case, the archetypal example would be the five-year anniversaries of the 1989 Tiananmen Square Massacre. The passing of June 4th reminds citizens of this tragic event, briefly shifting antipathy levels  $x$  upward and revolutionary thresholds downward.

The core hypothesis tested in this paper is that regimes anticipate coordination events, and repress accordingly.

#### *Pre-emptive Repression*

$H_1$ [coordination]: Dissident detentions will increase in periods shortly preceding and during coordination events.

This brand of targeted, pre-emptive repression can prevent any latent revolutionary bandwagons from taking off. The dissidents themselves are removed from the system and prevented from voicing opposition. The repressive act may also send a signal to the broader population about the expected costs of participating.<sup>6</sup>

Because coordination events often have a repetitive nature, we should expect to see cyclical patterns in dissident detentions. These may be punctuated by unanticipated shocks to the threshold distribution. My secondary hypotheses concern “reactive repression”:

#### *Reactive Repression*

$H_{2a}$ [shock]: Dissident detentions will increase in periods during and shortly following governance shocks.

$H_{2b}$ [external mobilization]: Dissident detentions will increase in periods during and shortly following external mobilization events.

$H_{2c}$ [division]: Dissident detentions will increase in periods during and shortly following leadership divisions.

$H_{2d}$ [transition]: Dissident detentions will increase in periods during and shortly following leadership transitions.

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<sup>6</sup>In Kuran’s (1991) example, a dissident detention would be the equivalent of removing individual 1 with  $R^1 = 0$ , and then shifting  $R^2 : R^{10}$  thresholds slightly higher.



Certain events affect citizens' revolutionary calculations but are effectively unpredictable or unable to be preempted. Bad governance shocks or scandals, as well as revolutions or social movements abroad, could heighten antipathy  $x_i$  and increase the relative attractiveness of democracy. Public division within the regime could signal a lack of resolve to put down a rebellion, bringing lower expected costs for voicing opposition at a given level of  $S$ . Leadership transitions similarly create a general air of uncertainty about the political leanings of new leadership. This uncertainty may lead to excessive optimism, and engender provocative behavior among dissident groups as they "test the waters" (Pierskalla 2010).<sup>7</sup> All of these events have the potential to lower revolutionary thresholds, in turn necessitating reactive repression on the part of the regime.<sup>8</sup>

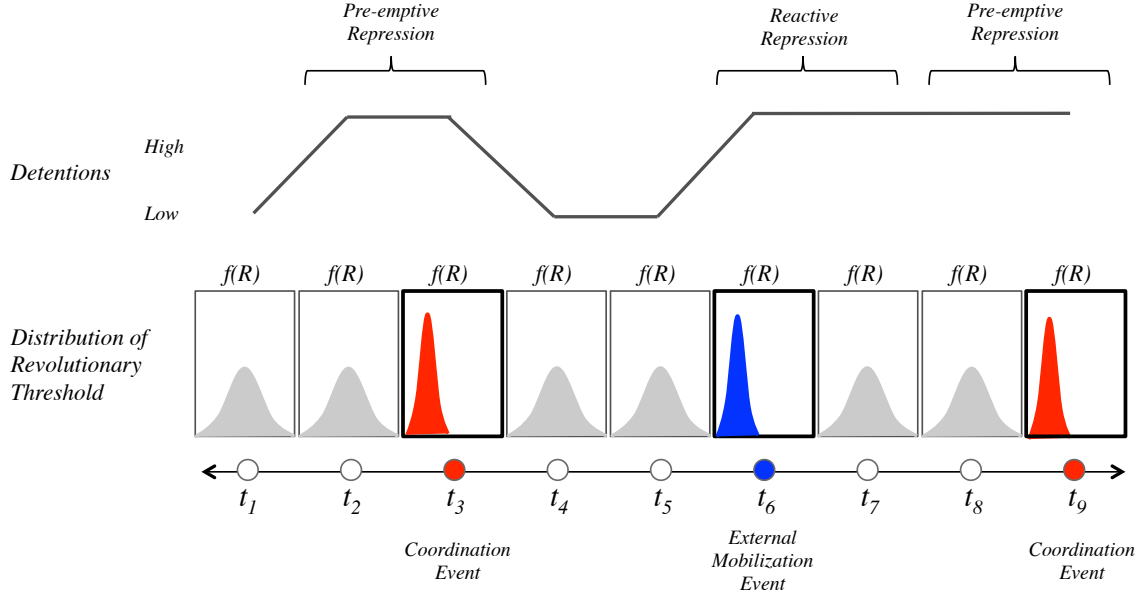
[Figure 1 About Here]

These dynamics are summarized in Figure 1. The figure shows the distribution of revolutionary thresholds  $f(R)$  in a hypothetical authoritarian society over nine time periods. The society experiences two coordination events occurring in  $t_3$  and  $t_9$ , and the distribution of revolutionary thresholds shifts leftward in these periods. We expect the regime to engage in pre-emptive repression to stave off this threat, with dissident detentions increasing in both  $t_2$  and  $t_3$ , and  $t_8$  and  $t_9$ . Following the coordination event, we see a return to normalcy— a rightward shift in the revolutionary thresholds in  $t_4$ ,  $t_5$ — and lower levels of detentions. This is interrupted by an unexpected external mobilization event in  $t_6$  that engenders reactive repression and more detentions in time  $t_6$  and  $t_7$ .

<sup>7</sup>In Pierskalla's (2010) framework, the opposition lacks information over the strength of the government, producing a similar repressive dynamic.

<sup>8</sup>Note that there is some debate as to whether repression might actually engender further mobilization (see Shadmehr 2014; Pierskalla 2010; Moore 1998). In my view, the sorts of detentions studied here are relatively well-contained in Chinese society, so this sort of small scale repression generally does not have a countervailing mobilizing effect.

Figure 1: Theoretical Framework



The key takeaway is that repression and detentions are a predictable function of events, both anticipated and unexpected. The remainder of the paper tests these hypotheses with quantitative data from the Chinese case.

## Data

### *Detentions Data*

The analysis relies on a time series dataset built from information contained in the Congressional-Executive Commission on China's (CECC) Political Prisoner Database (PPD). The CECC draws on a range publicly available Chinese and English sources to identify individuals that have been detained or imprisoned in China for non-criminal reasons. The PPD includes fields for: the date of detention, formal arrest, and trial (if applicable); activist issue category; the length of sentence; current detention status; location of residence and detention; and basic demographic information. The data also contains a short background description for each

prisoner. An example description is shown below:

#### Lu Gengsong

According to Chinese Human Rights Defenders, the Hangzhou City Intermediate People's Court on February 5, 2008, sentenced freelance writer and China Democracy member Lu Gengsong to four years in prison for "inciting subversion of state power," a crime under Article 105 of the Criminal Law. Before the sentencing, some of Lu's supporters were placed under house arrest. On April 7, the Zhejiang Provincial High People's Court affirmed the decision. Police in Hangzhou detained Lu on August 24, 2007, and formally arrested him on September 29. They said Lu had written articles "attacking the Communist Party." Lu frequently posted articles on the Internet about official corruption and reportedly exposed collusion between local officials and real estate developers. In the days before his detention, Lu reported on the psychiatric confinement of the activist He Weihua and attended the trial of another activist, Yang Yunbiao. On August 23, 2011, Lu completed his sentence and was released from the Hangzhou Xijiao Prison.

As of January 27, 2014— the date the full database was pulled— there were 7820 entries in the PPD, with the first detention recorded on May 29, 1981.

The term dissident can be used to describe anyone who actively challenges an established institution. For the purposes of this paper, I define political dissidents as individuals who aim to promote political reform in an authoritarian society through public criticism— consistent with the Kuran (1991) framework. The end goal is to promote democratization or at the very least, meaningful reform in this direction.

The vast majority of records in the CECC-PPD fall outside the scope of this definition. About 52% of detentions (4030 detentions) are related to ethnicity in some way, with Tibetan and Uyghur minorities the most common targets. Members of the Falungong comprise another 1367 detainees, and 44% of all detentions are related to religious issues. Detentions related to property (232 detentions) and environmental (119 detentions) concerns are also commonplace.<sup>9</sup>

<sup>9</sup>Many detentions are related to multiple issues, so the total number of detainee-issues exceeds the number of detentions.

The PPD includes a coding for democracy-related detentions, with 510 falling under this categorization. The analysis excludes any observations missing the precise month of the detention, as well as any detentions falling prior to 1998.<sup>10</sup> One issue is that the PPD is organized at the detainee level, and only records the individual's most recent detention. Publicly available media reports were used to identify recidivists in the data and add in their previous detentions, as well as track down the missing month information for many other entries in the data. This yielded a total of 204 known detentions of political dissidents occurring from 1998 through the end of 2014.

The individual detention data were aggregated to the monthly level, giving a count of political dissident detentions over time, referred to as *dem.det<sub>t</sub>*.<sup>11</sup> This time series, as well as its autocorrelation function, are shown in Figure 2.<sup>12</sup> We see a large number of relatively “quiet” months, followed by spikes in detentions clustered in a few brief periods. This is the core variation the paper seeks to explain.

[Figure 2 About Here]

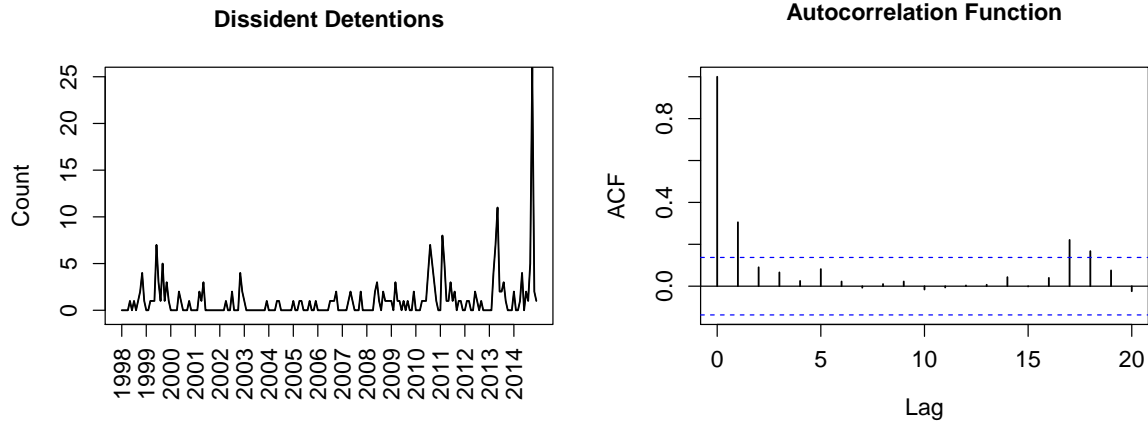
It is important to be forthright about the limitations of the data. The database is drawn from publicly available news sources, and thus fails to capture any detention that is successfully kept out of the public view. The true number of political dissident detentions in China

<sup>10</sup>China passed a major amendment to its Criminal Law in 1997 which included a revamping of sentences and political crimes. The analysis excludes all entries prior to 1998 in the interest of keeping comparability across the sample.

<sup>11</sup>Note that this definition excludes citizens seeking change in other issue areas, like labor rights, freedom religion, or environmental protection. It also excludes citizens seeking redress for personal grievances. In China, such individuals are frequently detained, but they do not fall under the scope of the argument here. It also excludes violent rebel or oppositional groups (Fielding & Shortland 2010; Shellman 2006; Shellman et al. 2013); I am focused on explaining variation in the proactive repression of individuals seeking to spur political change through criticism, activism, and the mobilization of others, not military behavior during full-scale revolution or civil war.

<sup>12</sup>The ACF does not provide strong evidence of a dynamic pattern in the data—serial correlation in *dem.det* appears to be minimal.

Figure 2: Total Known Political Dissident Detentions in China (1998-2014)



Note: Figure shows total political detentions per month  $det.dem_t$  in China from 1998-2014 and autocorrelation function for the time series. All data drawn from the augmented CECC-PPD.

certainly exceeds what I am analyzing here. Even the information on the known detentions is lacking— I am forced to exclude dozens of political dissident detentions because the month is missing.

In technical terms, this can be considered measurement error in the dependent variable. Such error generally inflates the standard errors of the estimate but does not induce bias, provided it is not systematically associated with the covariates of interest. In this case, my conversations with the individuals that manage the database did not suggest more or fewer detentions are recorded during these political calendar events, nor that the coding of the database somehow systematically biases the data in favor of the hypotheses tested here.

#### *Event Data*

In terms of independent variables, the core hypothesis concerns the effect of *coordination* events, which are known in advance and lower the costs of collective action. These might include anniversaries of key historical events, national commemorations/celebrations, or high-

level regime meetings. We expect the regime to engage in pre-emptive repression in advance of these dates. In addition, we might expect reactive repression in response to other exogenous shifts in the political opportunity structure: *governance shocks*, *external mobilization* events, *leadership division* events, or *leadership transitions*.

One methodological issue is that in any given polity, an infinite number of events occur over a given span of time. In earlier versions of the paper, known shifts in the political opportunity structure were simply identified by the author. To improve the objectivity and transparency of the coding, I first compiled a list of prominent events in China from 1998-2014 using timelines published online from BBC News, China Profile, and Wikipedia (zh). To this list, I added revolutions/political movements occurring abroad using data compiled by Mark Beissinger from his ongoing book project on revolutions. Five-year anniversaries of the Tiananmen Square Massacre and founding of the PRC, as well as key meetings of Party leadership, were also added. Such events are not included in the timelines but represent shifts to the political opportunity structure.

In total, 170 events were identified in this way. Using this list as the “universe of prominent events,” I then identified the five event types using the coding in Box 1. This coding yielded a total of 14 coordination events from 1998 to 2014, in addition to 30 other events that could engender reactive repression. The full set of coded events is shown in Tables A1a and A1b in the Appendix.

The dataset uses simple dummy indicators for whether the events occurred in a given month. For the coordination events, the “event window” for  $coord_t$  includes the month of the event and the preceding two months. This captures the pre-emptive logic of repression for these anticipated shifts in the political opportunity structure. For governance shocks

(*shock<sub>t</sub>*), leadership division events (*div<sub>t</sub>*), and external mobilization events (*ext.mob<sub>t</sub>*), the default window is three months— the month of the event and the following month two months. The twelve months following the two formal leadership transitions (*trans<sub>t</sub>*) will be included in the window for these events. The analysis systematically examines the sensitivity of the findings across these assumptions, and the core findings prove robust across different window lengths.

## Analysis

To assess the core hypotheses, I estimate different versions of the following interrupted time series model:

$$det.det_t = \alpha + \beta_1 coord_t + \gamma X_t + f(T) + \epsilon_t \quad (ITS)$$

Here, *det.det<sub>t</sub>* represents our dependent variable, the total number of democratic dissident detentions in a given month *t*. The primary independent variable is the indicator for a month including or shortly preceding a coordination event *coord<sub>t</sub>*, and the coefficient of interest is  $\beta_1$ . *X<sub>t</sub>* indicates a vector of additional covariates that will be included in some specifications, the various “control events” that could beget reactive repression (*trans<sub>t</sub>*, *div<sub>t</sub>*, *shock<sub>t</sub>*, and *ext.mob<sub>t</sub>*).

All estimates will employ a negative binomial model, which is preferable to OLS given the count nature of the data. One alternative option is the Poisson autoregressive model PAR(p) developed by Brandt and Williams (2001), but the *dem.det* variable does not show substantial serial correlation and the model does not converge (see ACF in Figure 2).<sup>13</sup> Some specifications will also include a cubic function of time *f(T)* to account for any temporal

<sup>13</sup>The data also exhibits overdispersion, which would lead a Poisson model to systematically underestimate the uncertainty in the parameter estimates.

trends in the data.

[Table 1 About Here]

Table 1: Interrupted Time Series Estimates

	(1)	(2)	(3)	(4)	(5)
<i>coord<sub>t</sub></i>	0.401 (0.262)	0.701*** (0.253)	0.670*** (0.235)	0.638** (0.299)	0.692*** (0.232)
<i>div<sub>t</sub></i>		-0.538 (0.470)	-0.438 (0.452)	-0.035 (0.522)	-0.505 (0.413)
<i>shock<sub>t</sub></i>		0.042 (0.406)	0.166 (0.386)	0.382 (0.460)	-0.028 (0.371)
<i>extmob<sub>t</sub></i>		0.715*** (0.214)	0.479** (0.202)	0.821*** (0.257)	0.637*** (0.196)
<i>trans<sub>t</sub></i>		0.654** (0.319)	0.333 (0.317)	0.794** (0.321)	0.471 (0.294)
<i>constant</i>	-0.025 (0.132)	-0.419** (0.166)	0.451 (0.405)	-0.360** (0.148)	-0.472** (0.185)
Window	3/12	3/12	3/12	2/9	4/15
$t + t^2 + t^3$	No	No	Yes	No	No
N	204	204	204	204	204
LL	-287.492	-277.449	-273.952	-278.477	-277.401
AIC	578.984	566.899	561.904	568.954	566.802

Note: Table shows results of regressions of *det.dem<sub>t</sub>* on the various event window indicators. All models use a negative binomial specification. Significance levels reflect one sided hypothesis tests. \*  $p < 0.10$  \*\*  $p < 0.05$  \*\*\*  $p < 0.01$ .

The coefficient estimates for five different models are shown in Table 1. The table explores robustness across different covariate sets and assumptions about the length of the event windows. Model 1 is the simple bivariate regression, using a three month window for *coord<sub>t</sub>*. The estimate is positive but does not reach conventional levels of statistical significance.



Model 2 includes the four different types of “control events” that yield reactive repression (leadership transitions, leadership divisions, governance shocks, and external mobilization), with the event window set to three for  $coord_t$ ,  $div_t$ ,  $shock_t$ , and  $extmob_t$ ; twelve for  $trans_t$ . Model 3 includes temporal polynomials ( $t+t^2+t^3$ ). Model 4 presents a shortened time window for all the event variables (two for  $coord_t$ ,  $div_t$ ,  $shock_t$ , and  $extmob_t$ ; nine for  $trans_t$ ), and 5 presents a longer window (four for  $coord_t$ ,  $div_t$ ,  $shock_t$ , and  $extmob_t$ ; fifteen for  $trans_t$ ).

Once the basic event controls are introduced, the estimated effect of coordination events on dissident detentions proves both substantively and statistically significant, providing evidence in favor of the pre-emptive repression hypothesis  $H_1$ . If a month precedes or includes a coordination event, the expected log count of the number of detentions increases by 0.6 to 0.7. In incidence rate ratio terms, this translates to about a 95% increase in the expected number of detentions. Given that there are fourteen such events in the dataset, the cumulative effect on repression is quite large.

As expected, the coefficients on external mobilization events  $ext.mob_t$  and leadership transitions  $trans_t$  also prove positive, although estimates for the latter seem more sensitive to the event window assumption and the introduction of time trends. Interestingly, the indicators for leadership division  $div_t$  and governance shock events  $shock_t$  do not seem to have substantial explanatory power. This is not to say these events do not matter for the mobilization-repression calculus, but perhaps they matter less than the other three concepts included in the model. It is also possible that the events coded in these categories were not drastic enough to necessitate meaningful increases in repression.

To test the robustness of the core finding on coordination events, I conduct a sensitivity analysis that probes the distribution of the coefficient estimates across different covariate

sets. The sensitivity analysis includes all possible combinations of the following covariates:

*coord<sub>t</sub>*: (event window = 2 months, 3 months, 4 months)  
*div<sub>t</sub>*: (exclude, event window = 2 months, 3 months, 4 months)  
*shock<sub>t</sub>*: (exclude, event window = 2 months, 3 months, 4 months)  
*extmob<sub>t</sub>*: (exclude, event window = 2 months, 3 months, 4 months)  
*trans<sub>t</sub>*: (exclude, event window = 9 months, 12 months, 15 months)  
*t*: (exclude,  $t + t^2 + t^3$ )

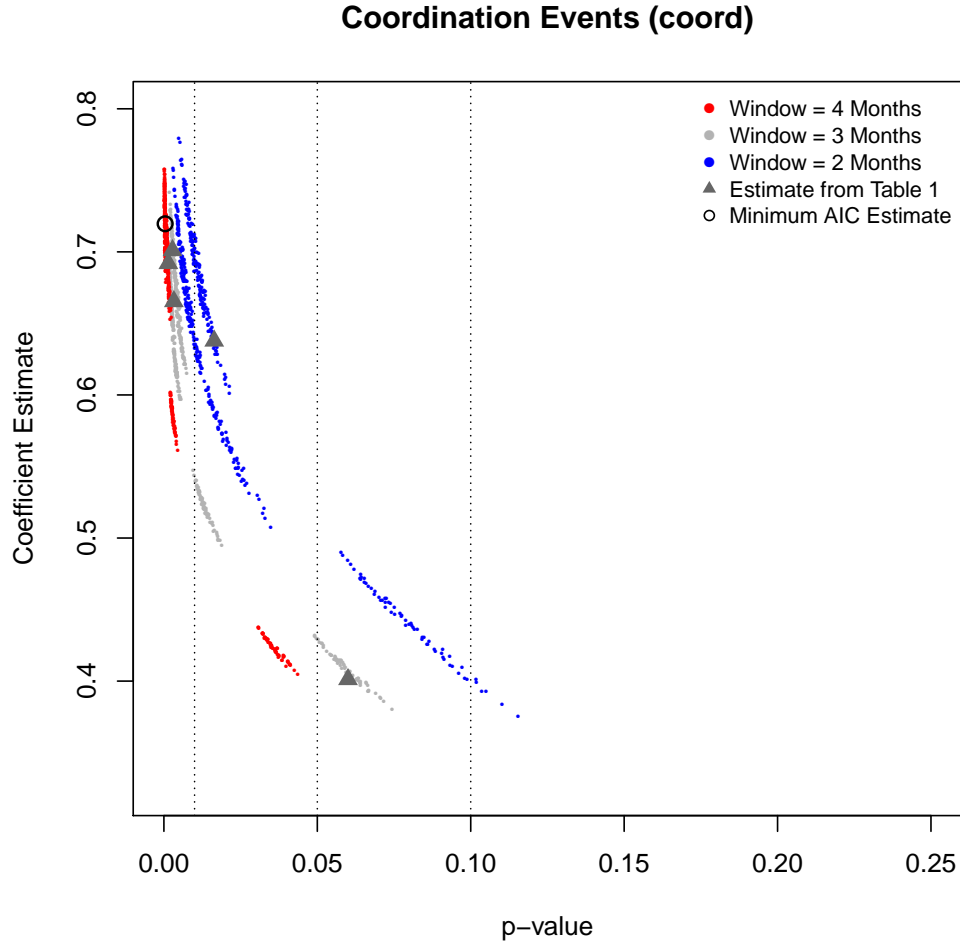
In total, 1536 models (3 x 4 x 4 x 4 x 4 x 2) were estimated.

The results of the sensitivity analysis are shown in Figure 3. The figure depicts the coefficient estimates and one-sided p-values for *coord<sub>t</sub>*, with each point representing the output of a different model. The red points signify models with a four month window for the coordination event, grey signifies three months, and blue signifies two months. The triangles indicate the models shown in Table 1, and the circle indicates the model with the lowest (“best”) value for the Akaike Information Criterion (AIC), a measure of statistical fit. The figure suggests that the estimates are robust to different covariate sets. The estimates of effect size tend to diminish with the event window size, but nearly all specifications reach conventional levels of significance. Those that do not tend to exclude the *ext.mob<sub>t</sub>* covariate, which appears to be an important driver of detentions and covaries with *coord<sub>t</sub>*.

[Figure 3 About Here]

As a final exercise, I visually examine the predictive utility of the model and contextualize the importance of these events. Figure 4 again shows the time series of dissident detentions (same as the left panel of Figure 1). The grey triangles indicate the fourteen coordination events, which prove associated with large spikes in detentions. The 10th and 25th anniversaries of the Tiananmen Square Massacre, as well as the Beijing Olympics and Liu Xiaobo’s reception of the Nobel Peace Prize, produce marked increases in the preceding months.

Figure 3: Results of Sensitivity Analysis



Note: Figure shows results of sensitivity analysis for the coefficient estimate on  $coord_t$ . Each point represents the estimate a single model; 1536 models were estimated in total.

[Figure 4 About Here]

The dashed red line depicts predicted values from the model, which does appear to have some predictive power.<sup>14</sup> It picks up many of the noticeable spikes in the data, though it tends to underestimate the magnitude of those spikes. In particular, the Occupy Central movement

<sup>14</sup>Throughout this exercise, I utilize the model from the sensitivity analysis that had the minimum AIC. The covariates for this model include  $coord_t$  (window = 4 months),  $extmob_t$  (window = 4 months),  $trans_t$  (window = 9 months), and  $t + t^2 + t^3$ . Note that  $shock_t$  and  $div_t$  are excluded in this specification, which speaks to their lack of predictive power.

in Hong Kong— which arguably represented the greatest revolutionary threat to the regime since the Tiananmen protests— brought a huge surge in detentions in mainland China.<sup>15</sup> This event is captured as an “external mobilization event”, but clearly it entails a greater threat to the regime than some of the other protests/revolutions in this category. Future extensions of this sort of analysis might find it fruitful to disaggregate external mobilization events into different subcategories.

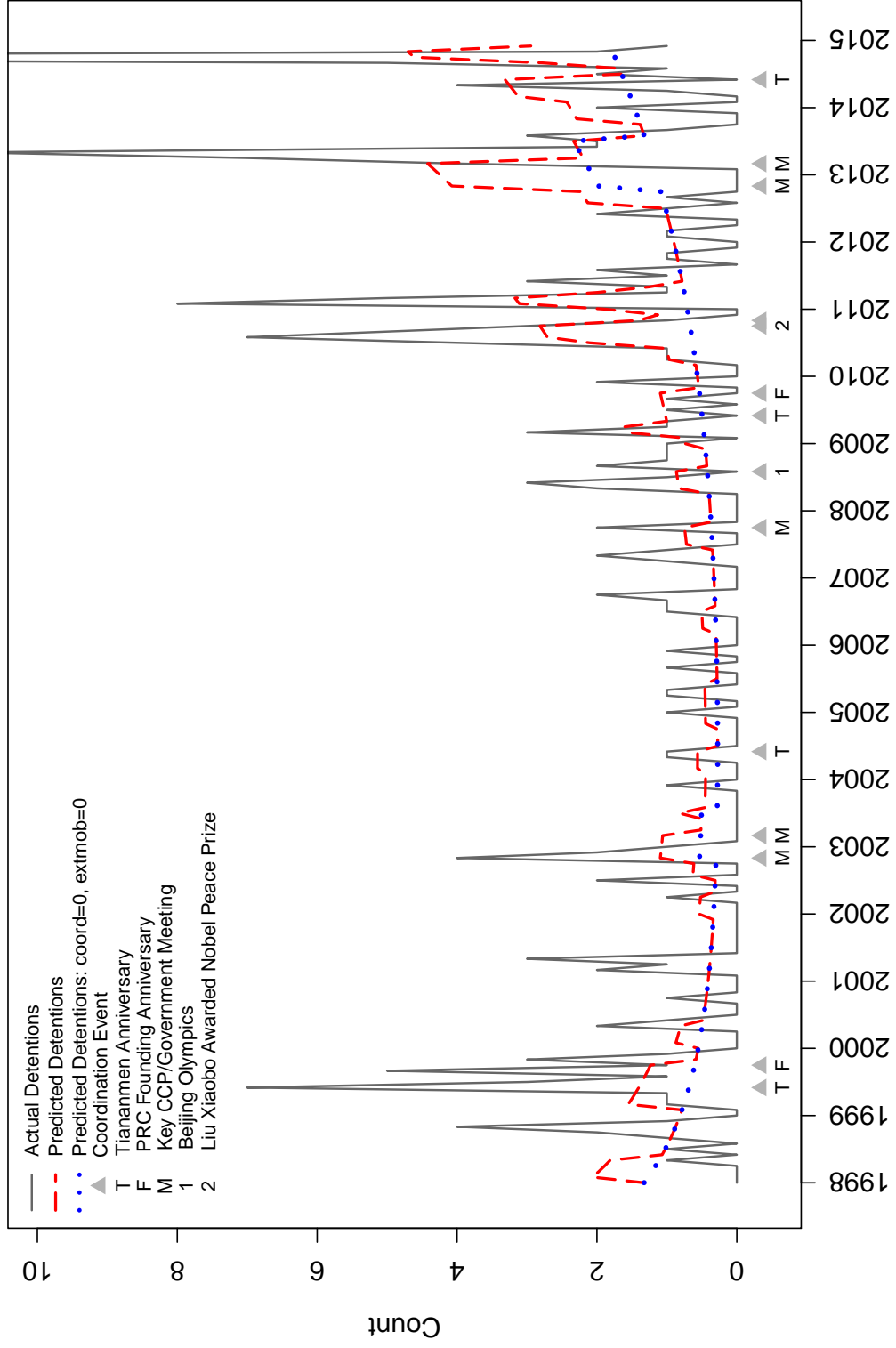
The dotted blue line depicts the predicted number of detentions, setting the values of  $coord_t$  and  $extmob_t$  to zero throughout the analysis period. In other words, it shows the number of detentions that would have occurred in the absence of these events. Overall, there were 220 publicly observable detentions of political dissidents (active on the democracy issue) in China from 1998 to 2014. The model predicts about 217 detentions using the true covariate values, as depicted by the dashed red line. If we had observed no external mobilization events ( $extmob_t = 0$  throughout), we would expect to have observed about 185 detentions over this period. If there had been no coordination events ( $coord_t = 0$  throughout), we would expect to have observed about 170 detentions over this period, a decrease of about 20%. If there were neither external mobilization nor coordination events ( $extmob_t = 0$  and  $coord_t = 0$  throughout), the expected number of detentions is about 139, as depicted by the dotted blue line. These two types of events alone seem to be responsible for about 35% of dissident detentions in China during this period.

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<sup>15</sup>Note that all detentions in Hong Kong are excluded from the dataset.

Figure 4: Predicting Dissident Detentions in China

### Dissident Detentions



Note: Figure shows total political detentions per month in China from 1998-2014 as they relate to key events. The dashed red line shows predicted values from the model (with lowest AIC). The dotted blue line shows predicted values setting  $coord_t = 0$  and  $extmob = 0$ . All data drawn from the augmented CECC-PPD.

## Conclusion

Repression is a predictable function of a country's political calendar. Authoritarian regimes anticipate coordination events that heighten the mobilization potential of the population and preemptively repress political dissidents. Historical anniversaries, high-level regime meetings, and even sporting events are responsible for crackdowns. The analysis also shows evidence that detentions in China rise following leadership transitions and external mobilization events.

This research complements the cross-national literature on repression and demonstrates the value of collecting more granular, within-case event-based abuse data (Davenport 2005; Fielding and Shortland 2010; Francisco 1995, 1996; Moore 1995, 1998; Rasler 1996; Shellman 2006). One promising avenue would be to test for the presence of these cyclical, event driven dynamics in other authoritarian systems. Replication of this empirical analysis requires only a simple time series of dissident detentions, coupled with information on local political events.

Beyond testing the generalizability of the findings, future research can address additional questions relating to the treatment of political dissidents. A rich legal literature focuses on the determinants of sentencing outcomes for criminal defendants in the U.S. context. Although the specifics vary from study to study, the basic design is to investigate associations between case-level covariates and punishment severity (see Britt 2000; Huber & Gordon 2004; Kleck 1981; Mitchell 2005; Steffensmeier et al. 1998; Steffensmeier & Demuth 2000). For example, in their regression analysis of federal court data from 1993-1996, Steffensmeier and Demuth (2000) find that ethnicity has a small to moderate effect on sentencing, with outcomes favoring white defendants over minority defendants. Huber and Gordon (2004) show that for elected judges in Pennsylvania, sentencing becomes more severe as reelection approaches.

Although the data on political dissidents is less comprehensive, it may be possible to

extend this general approach to China and other authoritarian systems. In the CECC-PPD, we observe substantial variation in the length of detentions across dissidents, as well as the legal process itself. Of the 220 political dissidents detained from 1998 to 2014, only about half were ultimately convicted of a crime. Detention lengths range from a few hours to fifteen years. Some detainees report physical or verbal abuse during imprisonment, while others seem to emerge relatively unharmed. Presumably, these patterns are driven by variation in the behavior and backgrounds of the dissidents themselves, although it may be possible that political calendar variables also play a role.

This paper explains the temporal logic of repression in China. Exploring new contexts and outcomes can further illuminate the interplay between dissidents and the regimes they challenge.

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## Appendix

Table A1a: Key Events in Analysis Period

Event	Month
<i>Coordination Events (<math>coord_t</math>)</i>	
- 10th Anniversary of Tiananmen Square Massacre	June 1999
- 50th Anniversary of founding of PRC	October 1999
- 16th Party Congress	November 2002
- NPC elects Hu Jintao President of PRC	March 2003
- 15th Anniversary of Tiananmen Square Massacre	June 2004
- 17th Party Congress	October 2007
- Beijing Olympic Games	August 2008
- 20th Anniversary of Tiananmen Square Massacre	June 2009
- 60th Anniversary of founding of PRC	October 2009
- Dissident Liu Xiaobo awarded Nobel Peace Prize	October 2010
- 16th Asian Games	November 2010
- 18th Party Congress	November 2012
- NPC elects Xi Jinping President of PRC	March 2013
- 25th Anniversary of Tiananmen Square Massacre	June 2014
<i>Leadership Transition Events (<math>trans_t</math>)</i>	
- Hu Jintao elected General Secretary of CCP	November 2002
- Xi Jinping elected General Secretary of CCP	November 2012
<i>Leadership Division Event (<math>div_t</math>)</i>	
- Death of Zhao Ziyang	January 2005
- Party elders criticize Propaganda Dept.	February 2006
- Chen Liangyu dismissed from CCP	September 2006
- Party elders criticize censorship	October 2010
- Bo Xilai removed from office in Chongqing	March 2012
- Zhou Yongkang dismissed from CCP	December 2014

Table A1b: Key Events in Analysis Period

Event	Month
<i>Governance Shock Event (<math>shock_t</math>)</i>	
- Yangtze River flooding	June 1998
- SARS virus spreads to mainland	March 2003
- Chemical plant poisons Songhua river	November 2005
- Sichuan earthquake	May 2008
- Milk powder scandal	September 2008
- Wenzhou train accident	July 2011
<i>External Mobilization Event (<math>ext.mob_t</math>)</i>	
- Indonesian Revolution	February 1998
- Bulldozer Revolution	February 2000
- Madagascar Electoral Revolution	January 2002
- Hong Protests against Anti-subversion Bill	July 2003
- Rose Revolution	November 2003
- Orange Revolution	November 2004
- Tulip Revolution	March 2005
- April Revolution in Nepal	April 2006
- 2009 Malagasy Political Crisis	January 2009
- Kyrgyz 2010 Revolution	April 2010
- Tunisian Revolution	December 2010
- Egyptian Revolution 2011	January 2011
- Libyan Revolution 2011	February 2011
- Euromaidan Uprising	November 2013
- Occupy Central Movement in Hong Kong	September 2014
- Burkinab Uprising	October 2014