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Repression as a Double-edged Sword: Resilient Monarchs, Repression and Revolution in the Arab World

Daniel Bischof* and Simon Fink**
*University of Leicester
**University of Bamberg

Abstract: *The Arab world shows a puzzling variation of political violence. The region's monarchies often remain quiet, while other autocracies witness major upheaval. Institutional explanations of this variation suggest that monarchical rule solves the ruler's credible commitment problems and prevents elite splits. This article argues that institutional explanations neglect the role of repression: increasing the scope of repression raises the costs of rebellion and deters rebels. However, the deterrence effect disappears if repression is used indiscriminately. If remaining peaceful offers no benefits, repression creates new rebels instead of deterring them. A time-series-cross-section analysis of repression and political violence in the Middle East and North Africa corroborates our argument and shows the u-curve relation between repression and violence. Once we control for repression, monarchies have no special effect anymore. Thus, our article addresses the discussion about monarchical exceptionalism, and offers an explanation why repression deters as well as incites political violence.*

Introduction

The Arab world exhibits a puzzling pattern of variation of political violence: Monarchies in the Middle East and North Africa (MENA) often remain quiet, while other autocracies witness upheaval. For example, Egypt and Tunisia have experienced major violence during the Arab spring, while Saudi Arabia or Oman remained comparatively peaceful.

Current studies argue that *institutional* factors explain the stability of Arab monarchies. The argument is that monarchies offer institutional solutions for autocrats' credible commitment problems. Informal rules of power-sharing ensure the distribution of rent shares, and allow the elite to monitor the rulers' decisions (Herb 1999, Magaloni 2008). Thus, monarchies may experience popular dissent, but can prevent splits of the elite, and avoid major turmoil.

We argue that institutional arguments neglect the role of *repression* in explaining the variation of political violence. A major body of literature theorizes the relation between repression and political violence (Carey 2006, Carey 2010, Davenport 2007a). While there is no consensus about the exact relation between repression and political violence, there is agreement *that* repression and political violence are causally related (Earl 2011).

Our argument is that the relation between repression and political violence in Arab autocracies follows a u-curve: Too little repression does not suffice to quash public unrest; too much repression causes people to rebel. Autocracies are always susceptible to political

violence, as the disenfranchised have an incentive to rebel. Thus, autocratic leaders use repression to deter would-be challengers (Bueno de Mesquita et al. 2005: 338-340). Hence, increasing the level of repression lowers the amount of political violence. However, the effect of repression depends not only on the credible commitment that rebels are punished, but also on the credible commitment that innocent bystanders are *not* punished. If repression is administered indiscriminately, there is no benefit in staying at the sidelines (Machain et al. 2011). Indiscriminate repression fails to deter potential rebels, but instead helps them to recruit more followers.

Empirically, we analyze a major dataset used to support the institutionalist argument (Menaldo 2012). However, we add a variable indicating the scope of repression, taken from the political terror scale (PTS) dataset (Wood and Gibney 2010).

The analysis corroborates our argument. The relation between repression and political violence follows a u-curve. Moreover, once we control for the level of repression, the violence-reducing effect of monarchical rule disappears. Thus, our results suggest that the low level of political violence in monarchies is due to their moderate use of repression.

Our results contribute to several discussions. *First*, we can corroborate the argument that monarchies witness less political violence. It seems that monarchies maintain more sophisticated coercive apparatuses (Bellin 2004) that use repression more discriminately and moderately. Thus, we can support the argument that variation between autocracies matters (Davenport 2007b). *Second*, we contribute to the literature on repression. Most accounts of the repression-violence nexus argue that repression raises the costs of rebellion (Tilly 1978). However, the calculus of repression is not about the costs of rebellion, but about the costs of rebellion in relation to the costs of remaining peaceful. If repression is so widespread that it makes no difference for the ordinary person whether she joins the rebellion or abstains, repression looses its deterrent effect. Thus, indiscriminate repression causes political violence (Araj 2008).

If our results are correct, the policy implications of our study are rather pessimistic. The study shows why the support of authoritarian security forces is a popular policy among western politicians. Western training and equipment enhance the effectiveness of security forces, and hence reduce political violence, generating short-term policy success. However, this policy creates a fragile 'tyrannical peace', that rests on the 'correct' dosage of repression. On the other hand, reducing repression may cause political violence if the legitimacy of the regime is in question. Thus, transition to political freedom must be managed carefully, and is often accompanied by political violence.

The article is structured as follows: Section two outlines current research on political violence in the MENA region and on the relation between repression and political violence. Section three derives our theoretical argument. Section four contains methodological considerations. Section five presents the empirical results. Section six concludes.

The literature

Uprisings in the Arab world have reinvigorated interest in monarchies, because they pose a puzzle: Arab presidential autocracies faced large-scale opposition movements and major political violence. Monarchies, however, still seem to enjoy sufficient support, and only little popular upheaval. In fact, as of October 2014, not a single king has been dethroned. But how could Arab monarchs maintain their rule when their republican counterparts failed?

The most common explanation for monarchical stability[1] relies on cultural factors. The Islamic tradition is thought to find its political expression in kingships. Many monarchs throughout the region stress their direct affiliation to Muhammad. Hence, they are not only less vulnerable to Islamic groups (Joffé 2011: 516), but can also rely on legitimization through religious beliefs (for a summary of the debate see Yom and Gause III 2012: 75). Additionally, tribal affiliations play a crucial role. Since tribalism resonates with the idea of strong leadership and hereditary succession, monarchical structures may reflect tribal norms (Tétreault 2011: 635).

However, the argument that monarchies face less upheaval because of traditional and religious ties does not suffice for explanation. Arab monarchies are young polities. Often, 'European style' monarchies were instituted by colonial powers (Yom and Gause III 2012). Even if we assume that tradition legitimizes monarchies, tradition is not immune to modernization. Autocratic rule cannot rely on cultural traditions, since cultural traditions can change over time.

A second explanation for monarchical exceptionalism focuses on the special institutional features of monarchies. Institutionalists argue that the regime type itself can explain the variation of uprisings in the MENA region (Herb 1999, Menaldo 2012).

The argument is that monarchies offer rules supporting the vital functional needs of autocracies (Menaldo 2012: 710-711). The major problem for autocratic rule is *first* to distinguish regime insiders from outsiders. In monarchies, the ruling family sets clear boundaries to the ruling elite and intermarriage strengthens family ties. *Second*, regime insiders need to determine and fix their rent share. Monarchies offer clear rules on which factions or members of the family are entitled to rents in the form of, e.g., military office. *Third*, the ruler's actions need to be monitored by the rest of the elite, so they can ensure they get their fair share of the cake. Again, the tightly-knit structures of royal families ensure that his family members can monitor the ruler. Thus, the major problem facing autocracies is a split in the elite. Monarchies offer a political culture that generates a cohesive elite with a stake in the system, while other autocracies face elite splits.

This argument resonates with the broader discussion about institutions of autocratic rule. All political leaders base their power on the support of a winning coalition of the selectorate (Bueno de Mesquita et al. 2005). The winning coalition needs not to be large – in autocracies, it is a small share of the population (Bueno de Mesquita et al. 2005: 51-55). Leaders must keep this group cohesive. A common way to keep the winning coalition satisfied is to distribute private goods among its members. However, credible commitment problems arise: how can the members of the winning coalition ensure that the dictator keeps his promises (Magaloni 2008)? The monarchical stability argument is that in monarchies most members of the winning coalition are members of the royal family. However, other institutions may serve the same purpose: parliaments, elections, and parties may offer credible constraints on the ruler's behavior, allow co-ordination between his followers, and co-opt the opposition (Brownlee 2011).

Yet, we must also take into account the *strategies* of autocratic rule, first and foremost, *repression*. Institutional theories focus on the elite: autocrats face the problem how to ensure that the winning coalition will earn a constant stream of benefits. However, the

[1] We are interested in political violence as a dependent variable. Much of the literature discusses the broader notion of political stability. We may for our purpose think of violence and stability as two sides of the same coin: violence is a major cause for political instability, and factors that cause political violence decrease political stability.

leader can also use repression to deter would-be challengers and their supporters (Bueno de Mesquita et al. 2005: 340).

The literature on the effects of repression on political violence is multi-faceted. The classic discussion revolves around the functional form of the relation between repression and political violence.[2] The *first* argument is that repression deters political violence, as it raises the costs for collective action (Tilly 1978). The argument builds on Olson's ideas of collective action and sees repression as affecting would-be rebels cost-benefit calculations. The *second* argument is that repression incites rebellion by micromobilization processes, facilitating coalition building in the opposition, and generating support for the opposition (Araj 2008). The *third* and the *fourth* argument suggest nonlinear effects. Some scholars postulate a u-curve. Repression raises the costs for collective action, but if repression is applied indiscriminately, the benefits of remaining peaceful decrease (Machain et al. 2011, Mason and Krane 1989). Other scholars postulate an inverted u-curve, and suppose that people choose peaceful means of protest in the absence of repression, are deterred by extremely high levels of repression, and that 'murder is in the middle' (De Nardo 1985, Muller and Weede 1990, Pierskalla 2010).[3]

There is little reason to believe that a universal relation between repression and political violence can be found. Repression and political violence interact in complex ways, with challengers substituting violent for nonviolent protest forms in reaction to repression (Lichbach 1987), with effects depending on the structure of the challenger groups (McLauchlin and Pearlman 2012), the presence of third-party threats (Pierskalla 2010), or the institutional context (Carey 2006). Thus, it seems appropriate not to look for a universal law of repression, but to try to find mid-range theories applicable to regional contexts.[4]

To conclude, our theoretical argument starts from the diagnosis that current theories of monarchical stability in the Arab world overemphasize the institutional foundations of monarchical rule and neglect the role of repression. While there is disagreement about the exact relationship between repression and political violence, it is undisputed *that* repression has to be taken into account when explaining political violence.

The theoretical argument: Repression as a credible commitment problem

Our theoretical argument starts with the assumption that autocracies are always in danger of turmoil. Autocracies are characterized by small selectorates and small winning coalitions (Bueno de Mesquita et al. 2005). Private goods are distributed to a narrow circle of insiders; the production of public goods is low. Thus, the number of disenfranchised who gain from regime change is large, and the incentives for rebellion are high (Bueno de Mesquita et al. 2005: 342). Similarly, members of the selectorate who are not members of the winning coalition have an incentive to join a challenger and try to depose of the leader.[5]

[2] Over time, a considerable variation of dependent variables has been used. Some studies focus on collective action in the broadest sense, some on protest, some on major political violence. For our purposes, the unifying element is the question how people react to repression.

[3] Methodologically, the body of literature does not add up to cumulative knowledge. Too many operationalizations of repression are combined with various operationalizations of political violence, and a large variation of country sets (Davenport 2007a). Moreover, many of the early empirical applications use cross-sectional data only and have problems disentangling endogeneity problems.

[4] Moreover, we are only interested in the effects of repression, not its multi-faceted determinants.

[5] In terms of selectorate theory, the argument about monarchic stability addresses only one source of political violence: Splits in the political elite, i.e. the risk that members of the winning coalition defect to a new coalition.

Empirical studies show that this assumption is plausible for the Arab world. Overall, Arabs wish to preserve the preeminent position of Islamic faith, but do not reject the idea of democracy *per se*. Norris (2011: 82-101) even shows similar democratic aspirations between 'electoral democracies' – e.g. Jordan – and liberal democracies. Thus, the preference for regime change is ever present among the population, but autocratic regimes do not offer legal venues to achieve this change.

The classic instrument to secure autocratic rule is repression. Repression is thought to raise the costs for political protest and deter would-be challengers and their supporters (Bueno de Mesquita et al. 2005: 340). Hence, in autocracies, we expect political violence in the absence of repression, and a decrease of political violence with an increase of repression. The plausibility of the argument is corroborated by case studies. Autocracies in the MENA region have large repression apparatuses, and little hesitation to use them (Bellin 2004, Brownlee 2002).

However, using repression does not work indefinitely. Repression needs to be accompanied by two credible commitments: *First*, the commitment that challengers and their supporters will be punished. This is the main argument of much of the repression literature: the anticipated costs of punishment have to outweigh the potential benefits of rebellion. However, there is an often overlooked *second* credible commitment: protesters are punished, *but peaceful bystanders remain unharmed* (Bueno de Mesquita et al. 2005: 345, Machain et al. 2011). If repression is widespread and indiscriminate[6], and innocent bystanders are subject to punishment, the advantages of 'sitting out' the rebellion vanish. Rebelling may be costly, but remaining peaceful is also costly, hence, rational actors may choose to join a rebellion, since the rebellion at least offers a potential benefit. In contrast, sitting out does not necessarily offer any benefits anymore. Moreover, potential rebels receive new information about possible actions. They learn that no matter which action is chosen, the costs are the same. Yet, joining the protest at least presents the opportunity to change the political *status quo*. Thus, massive arbitrary repression does not deter protesters, but generates them (Herreros 2006: 675).[7]

This effect may be all the more true for members of the elite. As long as they are sure that their loyalty to the autocrat pays off and they are spared from repression, they have little reason to mount a challenge against the incumbent. However, if repression is so widespread that even members of the elite cannot be sure that they or their friends and families will not be targets of repression, they might think about using their resources to mount a challenge, and a split in the elite occurs.

The extensive use of violence might also diminish the collective action problem revolutionaries face. Massive and arbitrary repression signals to disparate opposition groups that the autocrat's legitimacy is waning and that they are not alone in their struggle. If leaders are widely perceived as legitimate, they do not need to resort to

[6] Analytically, we have to distinguish between the intensity and the scope of repression. Intensity concerns the severity of repression, scope concerns the number of people affected by repression measures. However, autocrats can hardly increase the intensity of repression without increasing its scope. It is nearly impossible to use massive repression in a discriminate way. For example, widespread police raids to ensure that all would-be protesters are caught necessarily imply the arrest of innocent people; the use of tear gas against protesters will harm bystanders in the neighbourhood, and curfews or checkpoints affect all citizens equally.

[7] Empirically, we see how the indiscriminate use of repression causes peasants to join guerrilla movements (Mason and Krane 1989), and helps hardliners gain the upper hand in protest organizations (Araj 2008). Concerning the external dimension, massive repression could alienate external partners. However, current research shows that this form of conditionality of support is little used in the MENA region (Berger 2011).

repression (King 2009: 65). If would-be rebels are unsure whether they are facing an autocrat whose legitimacy is strong or weak, the widespread use of repression sends a signal that they are facing an autocrat who is widely perceived as illegitimate. In this way, indiscriminate repression can cause the emergence of broad cross-class coalitions (Goldstone 2011).

To conclude, our theoretical argument predicts a u-curve relationship between repression and political violence in the MENA region. We argue that too little repression is related to political violence, as it does not suffice to offset the benefits of regime change that successful political violence promises. Increasing repression deters would-be protesters up to a turning point. From the turning point on, large-scale repression makes remaining peaceful an unattractive option and generates political violence.

Hypothesis: The variation of repression can explain the variation of political violence in the Arab world. The relationship is u-shaped: moderate repression subdues political violence, low and high repression increase political violence.

Our hypothesis does not claim to be universally valid. The conditions under which repression causes or deters political violence are complex. For example, our hypothesis does not apply to democracies, as they are hypothesized to have a different repression logic than autocracies (Daxecker and Hess 2013). Furthermore, we limit our analysis to the MENA region. We want to take issue with the claim that monarchies are less likely to experience political violence than other autocracies, and the MENA region is the obvious candidate to find autocratic republics as well as monarchies. According to our argument, internal peace is not caused by monarchical institutions, but created through moderate repression.

Methods: A quantitative study of the MENA region

To test our argument, we re-analyze the major study supporting the monarchical stability argument in the MENA region (Menaldo 2012). The MENA region is particularly interesting to test these arguments, since today eight out of the fifteen kingships in the world in which the monarch either holds all power or personally exercises it are to be found in the MENA region. For our re-analysis we follow the procedures outlined by Menaldo (2012) in most regards.[8] Menaldo's dataset is based on Bank's cross national time-series data archive (Banks and Wilson 2009). The dataset includes Morocco, Algeria, Tunisia, Libya, Egypt, Sudan, Jordan, Saudi Arabia, Yemen[9] , Oman, the United Arab Emirates, Kuwait, Bahrain, Qatar, Iran, Iraq, Lebanon, and Turkey from 1950-2009.

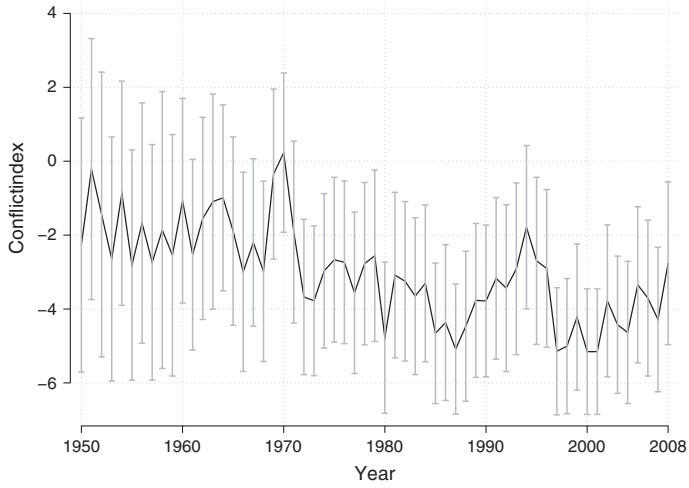
The *dependent* variable is the Conflict Index, a weighted average of assassinations, strikes, guerrilla warfare, government crises, purges, riots, revolutions, and anti-government demonstrations (Banks and Wilson 2009). We exclude purges from the index, since purges are repressive actions and should not appear on both sides of the equation. Following Menaldo, we include the logged index, to avoid overestimating differences across years and units.[10] As Figure 1 shows, the index usually has negative values due to logging. The figure demonstrates that the average amount of political violence has

[8] The excellent replication data can be found at http://faculty.washington.edu/vmenaldo/

[9] North Yemen until the unification in 1990.

[10] Like Menaldo, before logging we recoded '0' into '.001', since log(0) is undefined. We are aware that adding '1' instead of '.001' is the more suitable mathematical solution. However departing from Menaldo's solution would also make comparison to his results unfeasible.

Figure 1: Logged Conflict Index, 1950–2008



Source: Authors' own.
Note: Yearly means across all countries (spikes are 90% confidence intervals).

decreased since the 1950s. However, the cross-national variation – as seen in the high standard deviations – is considerable and in need of explanation.[11]

The *independent* variables are the same used by Menaldo (2012: 714). *Monarchy* enters the models as a dummy variable. *Log(Total Fuel Income per Capita)* operationalizes the notion that rentier states can buy off the opposition using oil rents (Schlumberger and Matzke 2012). *Ethnic fractionalization, log(Population Size) and percent Muslims* are controlled for because they are significant in previous studies (Wright 2008: 326). *Log(Per Capita Income) (PCI)* addresses the modernization thesis: wealthier countries are supposed to experience transitions to democracy, and in its course, more political violence. *Log(Surface Area)* controls for the possibility that smaller countries are less conflict-prone. A *Persian Gulf dummy* and a *democracy dummy* denoting the very few democracies in the MENA region[12] complete the battery of control variables.

To these variables, we add the repression measure provided by the Political Terror project. The Political Terror Scale (PTS) is the most commonly used indicator of state violations of citizens' physical integrity rights (Wood and Gibney 2010), and consists of two measurements: One measurement is based on reports by Amnesty International; a second on the US State Department.[13] The PTS is appropriate for our purposes, because

[11] Moreover, following Menaldo (2012: 719), we disaggregate the conflict index as a robustness check to see whether repression has different effects on different forms of political violence.

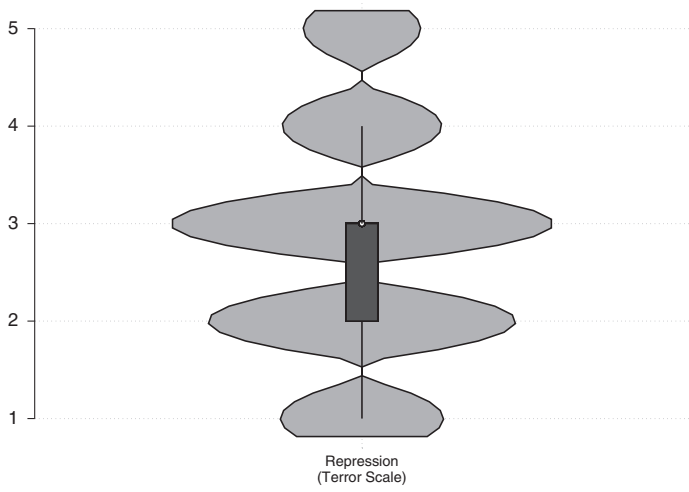
[12] Sudan, Turkey, Lebanon, in total only 79 of 1011 observations are democracies (7.8%).

[13] Unfortunately, the PTS only provides data from 1976 on, and this only in the case of the US State Department index. We use only the US State Department index to avoid losing observations. However, the correlation between the two indices is 0.81. Furthermore, scholars agree that the State Department accurately reports human rights violations. The two versions of PTS scores differ by more than one point of the scale in only 4% of the observations (Poe et al. 2001: 659). Furthermore, using the amnesty scale returns the same effect of repression, but incorporates only 446 observations.

it measures the *actual acts* of repression *carried out by the state* (Wood and Gibney 2010: 369).[14] Moreover, the scale of the index reflects our theoretical argument that intensity and scope of repression go hand in hand. A score of 1 indicates a country in which political imprisonment, torture, and murders are extremely rare. Countries that score 2 infrequently imprison people for nonviolent political activity. Torture and beatings are exceptional and political murders are rare. A score of 3 indicates a country where political detention without trial or execution of political opponents is accepted and common; a score of 4 denotes countries in which the practices denoted for level 3 encompass a large number of people and in which murders and disappearances are a common part of life; a score of 5 indicates a country where such practices are imposed on the whole population for political reasons (Poe et al. 1999: 297).[15] Figure 2 shows that repression as measured by the PTS is normally distributed throughout our sample, meaning that Arab autocrats are not mainly located at the extremes, but mostly use medium repression levels.

We lag the repression index by one year in our models, since this fits our theoretical assumption that the repression of yesterday generates the political violence of today. We thus model the short-term effects of repression. As argued in the theoretical section, the causal relationship between repression and political turmoil remains debatable and endogenous. To address this issue, we conduct Granger causality tests (Down and Wilson 2010, Hood et al. 2008).[16]

Figure 2: Distribution of repression



Source: Authors' own.
Note: Marker is the median, box indicates interquartile range, spikes extending to the upper- and lower-adjacent values as in standard box plots. Overlaid with this modified box plot is a density, estimated by univariate kernel density estimation.

[14] Many older studies of the repression-violence nexus operationalize only the potential for repression, using military personnel or institutional measures as independent variables (Muller and Weede 1994).
[15] The scores of 4 and 5 can be interpreted as 'Repression is used indiscriminately', which in our theoretical argument translates to 'Repression looses its deterrent effect'.
[16] We also run fixed effects models as robustness checks for country specific effects, as shown in Table S2.

To model the u-curve relationship between repression and political violence, we estimate a polynomial regression:

$$\hat{y} = b_0 + b_1 x_1 + b_2 x_2 \quad (1)$$

$$\text{where } x_2 = x_1^2.$$

Thus, we assume a non-linear relationship between repression and political violence. If repression (x_1) in the model rises by one unit, the expected political violence ($\hat{y}$) changes by $b_1 + 2b_2 x$.[17] If our hypothesis of a u-curve relationship between repression and political violence holds true, the linear term should show a negative sign, while the squared term should show a positive sign.[18]

We replicate Menaldo's procedure and estimate an OLS regression of the pooled data, and correct for econometrical time-series-cross-sections problems using Driscoll-Kraay standard errors. Alternatively, we estimate a pooled model with panel corrected standard errors (PCSEs), country and year fixed effects and a lagged dependent variable.[19]

Empirical Analysis: Repression as a double-edged sword

Table 1 contains the results of the empirical analysis. Column 1 is the baseline model used by Menaldo (2012) to support the institutionalist argument.[20] Column 2 adds repression and squared repression to test our argument. As some of the control variables are highly correlated and could be deemed problematic, columns 3-5 successively remove total fuel income, the Persian Gulf dummy and percentage of Muslims. Model 6 estimates a pooled model with panel-corrected standard errors and a lagged dependent variable.

Concerning the control variables, their coefficients for the most part correspond to previous results in the literature. Fuel income and per capita income are negatively associated with political violence, ethnic fractionalization is positively associated with political violence, as is the size of the population.[21] One remarkable result stands out: democracy is associated with more political violence. This result is in line with recent studies arguing that autocracies can readily employ repression, while the use of repression is a severe blow for a democracies' legitimacy. Hence, given the same level of repression, democracies should witness more violence (Daxecker and Hess 2013).

Concerning our theoretical argument, repression is significant across all models (Table 1). Furthermore, these results are stable across several model specifications (see Table S2 in the supporting information), even when we calculate the model by systematically leaving out each country and estimating the average of these calculations

[17] We compared our results to models that include only a linear repression term. The goodness of fit of the models with the squared term outperforms the linear models (see Table S2 in the supporting information).

[18] Our estimation technique treats the five-point repression scale as quasi-metric. This decision can be justified by the fact that the difference between the results of the quadratic term model and a model which includes the repression scale as dummy variables is negligible. Figure S2 in the supporting information shows the margins of both models.

[19] See the robustness checks in the supporting information.

[20] Based on our observation period from 1976-2009

[21] In terms of selectorate theory: Given that these countries are all autocracies with small winning coalitions, there is a larger portion of actors who want to overthrow the system. In addition, it may be easier for the rulers of smaller countries to buy off the opposition (Davidson 2012).

Table 1: Results of regression models

	(1)	(2)	(3)	(4)	(5)	(6)
Monarchy dummy	-2.02***	-1.18	-0.50	-0.50	-1.07	-0.35
	(0.545)	(0.760)	(0.764)	(0.764)	(0.543)	(0.546)
Lagged repression$_{t-1}$		-3.10***	-2.76***	-2.69**	-2.71**	-1.97***
		(0.711)	(0.705)	(0.762)	(0.766)	(0.546)
Lagged repression$_{t-1}^2$		0.61***	0.55***	0.54***	0.53***	0.45***
		(0.107)	(0.103)	(0.112)	(0.120)	(0.093)
Total fuel income (log)	-0.21	-0.31**				-0.24**
	(0.116)	(0.102)				(0.086)
Population (log)	0.69*	0.73**	0.87**	0.90**	0.71**	0.45
	(0.256)	(0.259)	(0.275)	(0.274)	(0.213)	(0.256)
Area (log)	0.01	-0.08	-0.17	-0.17	-0.13	-0.06
	(0.135)	(0.127)	(0.136)	(0.135)	(0.130)	(0.104)
Percentage of Muslims	-0.03	-0.03	-0.04	-0.05		-0.03
	(0.033)	(0.038)	(0.037)	(0.038)		(0.024)
Ethnic fractionalization	3.28	0.86	1.21	0.99	2.58**	-0.32
	(1.669)	(1.669)	(1.668)	(1.616)	(0.873)	(1.141)
Per capita income (log)	-0.06	0.17	-0.39	-0.41*	-0.56**	0.25
	(0.354)	(0.307)	(0.197)	(0.184)	(0.157)	(0.184)
Persian Gulf dummy	0.84	0.58	-0.26			0.39
	(0.452)	(0.444)	(0.427)			(0.437)
Democracy dummy	2.51**	2.25*	2.56**	2.62**	2.68**	1.61**
	(0.877)	(0.827)	(0.804)	(0.803)	(0.788)	(0.617)
Lagged conflict index$_{t-1}$						0.29***
						(0.049)
Observations	540	540	540	540	540	532
Number of countries	19	19	19	19	19	19
R^2	0.27	0.31	0.30	0.30	0.30	0.39

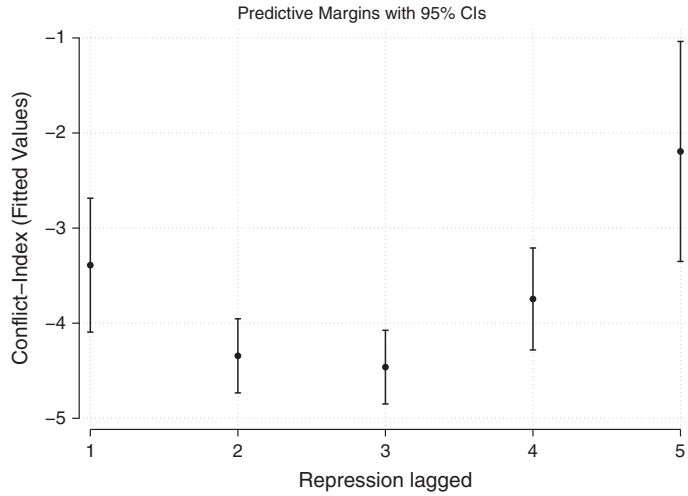
Notes: Driscoll-Kraay (1)-(5) or panel-corrected (6) standard errors in parentheses. ***p < 0.001, **p < 0.01, *p < 0.05.

(jackknife resampling). Moreover, we observe the hypothesized u-curve relationship between repression and political violence. The coefficient for repression is negative, while the coefficient for squared repression is positive.

Figure 3 illustrates our result in a more intuitive way: the lowest level of political violence is found in moderately repressive regimes, while regimes with little or high levels of repression exhibit higher levels of political violence.[22] While the operationalization of repression is rather crude, and specific values should not be overemphasized, it is interesting to note that the curve starts to rise again with a repression value of 4 – a value that represents regimes in which repressive acts encompass a large number of people, and

[22] Please note that we model only the short-term relationship. Scholars have argued that massive repression can in the long run crush revolutionary movements: "... in its early stages indiscriminate violence targeted against neutral nonelites can increase mass involvement in and support for oppositional collective action, including revolutionary activities. However, state terrorism when sustained has often had the opposite effect in Central America, smashing overt popular opposition to the terrorist regime." (Brockett 1993: 470) In effect, we only model the first part of Brockett´s argument. It still may be true that autocracies in the MENA region can crush revolutionary movements if they use *sustained* state terrorism over a long time. Our model simply can not capture this complex long-term dynamic.

Figure 3: Relation between repression and political violence



Source: Authors' own.

Note: Results based on, Table 2, model 6. The dots represent predictive margins of the dependent variable conditional on the repression variable, all other variables are kept constant at their means, except for the monarchy, Persian Gulf and Democracy dummies which are kept on their modes. The capped spikes indicate 95% confidence intervals.

in which murders and disappearances are a common part of life (Poe et al. 1999: 297), in other words: where there is no credible commitment that innocent bystanders are not harmed.

These results underpin our theoretical argument. Repression seems to be a double-edged sword in the MENA region. The indiscriminate use of repression does not deter, but generate rebels, because bystanders see no benefit in remaining peaceful. Thus, two countervailing observations can be combined: first, repression is often used by autocrats, and often reduces political violence (Albertus and Menaldo 2012). Second, repression causes political violence (Araj 2008). According to our results, both outcomes can occur, depending on the scope of repression.

Furthermore, current case studies give additional credibility to our conclusion. The revolution in Egypt is partly attributed to the harsh measures of the security forces (Brumberg 2013: 90), and the civil war in Syria was fueled by mass defections from the army, as conscripts joined the resistance, appalled by the massive repression (Nepstad 2013: 344-345) The funerals of those killed by the regime became focal points for further protest, amplified by coverage in the social media (Hinnebusch 2012: 109). The coverage about the funerals of friends and relatives, in turn increased the belief that "nobody was safe" anymore and motivated people to join the fighting ranks of the opposition. On the other hand, the relative lack of political violence in Jordan is explained by the fact that Islamic organizations are free from repressive onslaughts (Yom 2013: 130-131). As a 'hard case' for our argument, the stability in Algeria – a stable non-monarchy – is explained by the efficiency of the security apparatus: 'the regime [. . .] owes its resilience to the backing of the security forces, as the 2011 protests illustrated. This is not to be understood simply in terms of the sheer repressive capability of the state [. . .]. The strength of the security forces stems more from the effectiveness of their response to the unrest. In that respect,

the repressive apparatus of January 2011 was far superior to that of October 1988, when the army killed more than five-hundred demonstrators in just over ten days. During the week of rioting in January 2011, only three demonstrators died' (Volpi 2013: 111). Egypt under Sadat shows the backlashing effect of the absence of repression. Loosening the chains Nasser had put on the Muslim Brotherhood in 1981 resulted in smaller radial Islamist groups to re-organize themselves (Egyptian Islamic Jihad) and aiming to overthrow the regime. In October 1981, a cell of the Egyptian Islamic Jihad succeeded and assassinated Sadat.

The monarchy dummy variable is no longer significant once we control for repression. There is no difference between monarchies' and republics' political susceptibility to political violence, only between less, moderate and highly repressive regimes. Thus, our results qualify the findings of Menaldo (2012). Monarchies do not seem to be exempt from political violence *per se*. Our results suggest that monarchies have more sophisticated security forces (Bellin 2004), able to use the 'right' amount of repression. This does not mean that monarchies always use moderate repression – there is ample evidence that monarchs may use extremely little repression or lash out at their citizens. An illustrative example is Bahrain, where Saudi troops and the Gulf Cooperation Council crushed popular uprisings in 2011. However, the literature argues that this outburst of repression may be the result of power struggles within the royal family (Husayn 2015), and may thus be the exception rather than the rule.

However, monarchies use these extremes less often than republics. While Arab republics are infamous for wide-spread repression (e.g.: Hama-massacre 1982 in Syria; devastation of Kurdish cities 1993-1999 in Turkey; Al-Anfal campaign 1986-1989 in Iraq) comparable outrageous activities are almost unheard of in Arab monarchies (Morocco during the 'years of lead' appears to be an exception).[23]

The Granger causality tests present further support for this reading of our results. We follow the three step logic suggested in Hood et al (2008), as applied by Down and Wilson (2010).[24] Table 2 reports the results and the relevant null hypotheses for each of the steps of the Granger causality tests. Thus, the F_1 test shows that conflict does *not* Granger cause repression on conventional statistical levels across our pooled sample, while repression significantly Granger causes conflict in it.[25] However, this latter effect does not hold across all panels as the F_2 test reveals. Interestingly, repression significantly Granger causes conflict in six republics (Algeria, Iran, Turkey, Iraq, Egypt, Syria) but only in one monarchy (Morocco) as shown in the F_3 test. This underpins that monarchies largely choose repression more wisely, while republics tend to exaggerate the use of repression and thereby cause further challenges to their rule. As has been argued previously Morocco might be an exception due to the extensive use of repression during the 'years of lead'.

To delve deeper into our results, we disaggregate the political violence index into revolutions, governmental crises, guerilla wars, assassinations, protests, riots, and strikes.

[23] These examples are also supported by the PTS data, as can be seen in Figure S1 in the supporting information. In summary, most monarchies refuse to use harsh repression (4 and 5 on the PTS scale).

[24] We first tested our data for stationarity with the Levin, Lin, Chu Test, and our data fulfil the requirement of covariance stationarity. Since the panels need to be perfectly balanced, we exclude Lebanon from the Granger tests due to several missing data points during the civil war. In three occasions the State Department repression index reports missing values. We substitute these by using the Amnesty reports (Kuwait 1984, 1992) and linear interpolation (Oman 1992).

[25] We only report the results for the first two lags in the case of repression and one lag in the case of conflict. Longer lag structures did not report statistically significant results.

Table 2: Granger causality tests

***F1* Test, H0 = For all panels, x does not granger cause y.**		
Lags	*F-Test Results*	
	Repression -> Conflict	*Conflict -> Repression*
t_{-1}	3.17***	1.5
t_{-2}	1.4	
***F2* Test, H0 = For all panels, x granger causes y.**		
Lags	*F-Test Results*	
	Repression -> Conflict	
t_{-1}	3.06***	
***F3* Test, H0 = For panel I, x_{t-1} does not granger cause y.**		
Country	*F-Test Results*	
	Repression -> Conflict	
Morocco	2.82***	
Algeria	19.85***	
Iran	6.94***	
Turkey	7.79***	
Iraq	9.19***	
Egypt	2.96***	
Syria	4.83***	

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

The question is whether the u-curve relationship holds for the single elements of the index. We transform the original count variable into a binary variable and estimate probit models to elucidate whether repression is associated with a higher or lower probability of the disaggregated forms of political violence.[26]

The original institutionalist argument is that '... monarchy should be negatively associated with violent conflicts that can threaten the regime, it should not be associated with civil actions that may serve as a relief valve that keeps citizens from seeking violent means to elicit political change. Specifically, although Monarchy should be negatively associated with Revolutions, Government Crises, Guerilla Wars, [...] and Assassinations, it should not be systematically associated with Antigovernment Demonstrations, Riots, and Strikes' (Menaldo 2012: 718). Thus, the effect of monarchy is to prevent splits of the elite.

The empirical results are mixed. On the one hand, there is no significant relation between monarchy and the occurrence of revolutions, guerilla wars, antigovernment demonstrations, riots, and strikes (Table 3). On the other hand, monarchs are less often targeted by assassinations and government crises.

The second conclusion is that the u-curve relation between repression and political violence shows in four of the seven components of the political violence index (Figure 4). The pattern is intriguing: The repression-violence relation is visible in all of the major regime-threatening forms of political conflict (revolutions, government crises, guerilla wars and assassinations), that is, conflicts that involve a split in the elite. The spontaneous forms of unrest that require less collective organization and resources (strikes and demonstrations) are unaffected by repression, only riots are negatively associated with repression.

[26] Table 3 is based on Table 3 in Menaldo (2012), with repression variables added.

Table 3: Results of regression models. Disaggregated conflict index

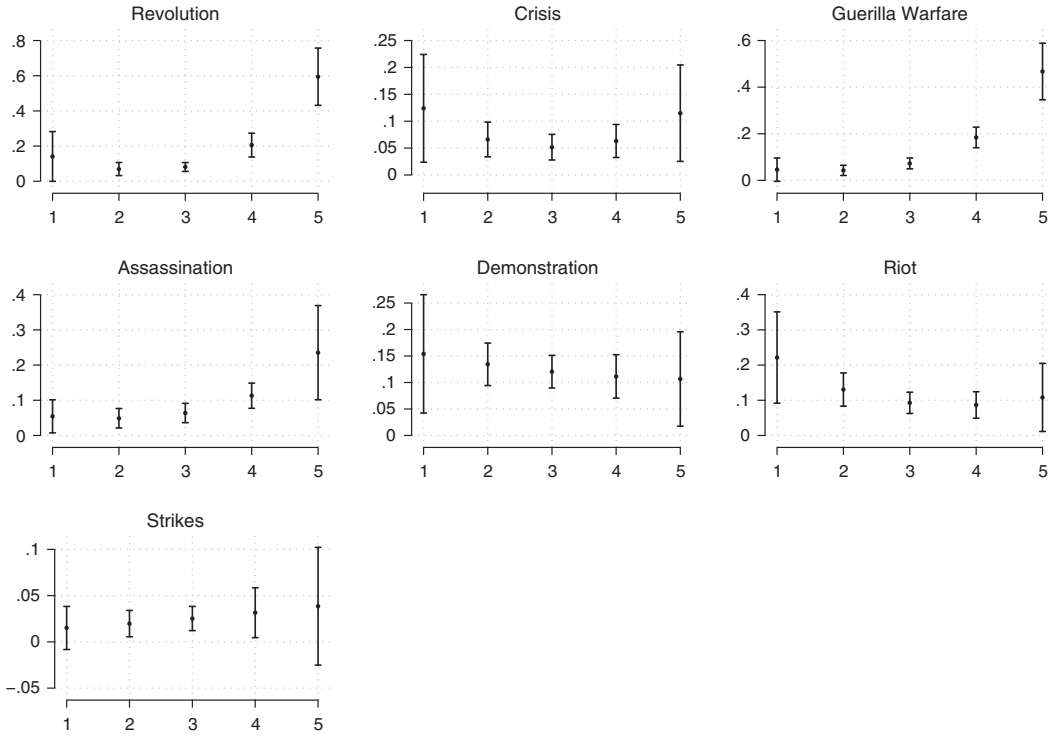
	(1) Revolut.	(2) Govt. Crises	(3) Guerilla War	(4) Assass.	(5) Antigovt. Demonst	(6) Riots	(7) Strikes
Monarchy dummy	0.24	-1.11**	0.09	-1.38***	-0.34	-0.07	0.40
	(0.387)	(0.498)	(0.288)	(0.408)	(0.327)	(0.376)	(0.510)
Lagged $repression_{t-1}$	-1.57***	-0.94**	-1.19**	-0.48	-0.09	-0.71**	-0.08
	(0.431)	(0.438)	(0.514)	(0.343)	(0.384)	(0.344)	(0.414)
Lagged $repression_{t-1}^2$	0.33***	0.15**	0.28***	0.12**	0.00	0.09	0.03
	(0.061)	(0.069)	(0.074)	(0.061)	(0.062)	(0.057)	(0.072)
Total fuel income (log)	-0.06	-0.18***	-0.13***	-0.13**	-0.01	-0.00	0.00
	(0.041)	(0.033)	(0.044)	(0.051)	(0.032)	(0.037)	(0.083)
Persian Gulf dummy	-0.29	0.44*	-0.15	0.24	-0.27	-0.19	-1.07**
	(0.204)	(0.258)	(0.342)	(0.412)	(0.207)	(0.197)	(0.515)
Percentage of Muslims	-0.03**	0.01	-0.03*	0.01	0.01	0.01	-0.03
	(0.014)	(0.017)	(0.015)	(0.018)	(0.016)	(0.014)	(0.023)
Population (log)	-0.05	0.13	0.40**	0.45**	0.48***	0.53***	0.44***
	(0.089)	(0.180)	(0.162)	(0.174)	(0.157)	(0.186)	(0.160)
Area (log)	0.07	-0.12	-0.22*	-0.22**	-0.17*	-0.13	-0.20
	(0.094)	(0.087)	(0.117)	(0.092)	(0.090)	(0.114)	(0.127)
Ethnic fractionalization	-1.25*	0.51	-0.69	-0.15	1.53**	0.64	-0.37
	(0.664)	(0.884)	(0.736)	(0.827)	(0.639)	(0.666)	(1.419)
Per capita income (log)	-0.35***	0.22	-0.11	0.57***	0.13	-0.09	0.12
	(0.126)	(0.154)	(0.112)	(0.179)	(0.124)	(0.113)	(0.287)
Democracy dummy	0.67*	1.13***	0.60*	-0.19	0.45	-0.26	0.03
	(0.350)	(0.271)	(0.327)	(0.357)	(0.315)	(0.263)	(0.460)
Economic growth	-0.04***	-0.02	-0.04***	0.01	-0.02***	-0.01	-0.01
	(0.009)	(0.013)	(0.012)	(0.010)	(0.007)	(0.007)	(0.008)
Observations	540	540	540	540	541	540	540
Number of countries	19	19	19	19	19	19	19
Pseudo R^2	0.37	0.27	0.38	0.26	0.15	0.14	0.23

Notes: Probit models, following Menaldo (2012, 719) *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Linear, Quadratic and Cubic Time Trends estimated to address temporal dependence but not reported.

This result underlines that one effect of repression is to change the cost-benefit calculation of members of the elite. Repression targets the resource mobilization of the opposition that is at the heart of the more complex forms of political violence. Strikes, riots and demonstrations are the weapons of the disenfranchised who have little to lose but much to win. Guerilla wars, government crises, revolutions and to some extent assassinations are only possible with participation of members of the selectorate or the elite, as only they can contribute major resources to these efforts.[27] Increasing the scope of repression first makes major forms of political violence more unlikely, as would-be defectors from the old elite fear the repercussions. However, if repression is so widespread

[27] One could argue that assassinations are simply random acts of individuals. While this may be true for some examples, most assassinations are complex efforts, in need of logistics, planning, and a minimum of physical proximity to the target – in short, acts that can more easily be carried out by (or with the help of) members of the elite (Iqbal and Zorn 2006, Torgler and Frey 2013).

Figure 4: Relation between repression and probability of different forms of political violence



Source: Authors' own.
Note: Results based on table 3. Dots represent predictive margins of the dependent variable conditional on the repression variable, all other variables are kept at their means, except for the monarchy, Persian Gulf and Democracy dummies which are kept on their mode. The capped spikes indicate 95% confidence intervals.

that even members of the old elite have to fear to be subject to repression, their calculation changes, and they join the opposition.[28] Thus, in the short run, indiscriminate repression causes massive political violence.[29]

Conclusion

This article demonstrates that repression can explain the variation of political violence in the MENA region. Repression is – at least in the short run – related to political violence in a u-shaped fashion: Increasing repression decreases political violence, but after a turning point, repression *generates* political violence instead of suppressing it.

The theoretical argument rests on rationalist microfoundations. Often, arguments about the effect of repression study only the costs that repression generates for would-be rebels,

[28] We confine our analysis to the MENA region. However, we note that very similar dynamics can be observed in Central America, where indiscriminate repression filled the ranks of the guerilla movements (Goodwin 2001: 159-169).

[29] This does not rule out that in the long run, repression may eliminate any opposition (Brockett 1993).

and conclude that repression suppresses political violence. However, these arguments neglect the implicit credible commitment problem. Innocent bystanders must be sure that they will not be subject to repression if they remain peaceful. If repression is widespread, and the probability of being the target of repression is the same, whether they remain peaceful or not, these bystanders may turn to the opposition.

Thus, our study contributes to the discussion on the effects of repression. Studying the MENA region, we can corroborate the argument that repression suppresses political violence (Albertus and Menaldo 2012) – if repression is used moderately and discriminately. We can also corroborate the argument that repression generates political violence (Sullivan 2014) – if repression is widespread and used indiscriminately.

Our second contribution is to qualify institutionalist theories of autocratic stability (Magaloni 2008, Menaldo 2012). If we control for repression, monarchies are as susceptible to political violence as republics. However, it seems that monarchies have superior security apparatuses and know how much repression they can use before incurring a violent backlash. This does by no means imply that monarchies always use only moderate repression. But it seems that on average, monarchies are better able to curb excessive use of violence by their security forces. This idea resonates with the argument that we should pay more attention to the role of the military (Schneider 2011). The key to autocratic rule is a sophisticated coercive apparatus (Bellin 2004, Brownlee 2002). Combining our findings with that of Menaldo (2012), the obvious new research question is *why* monarchies have better coercive apparatuses. Our first speculation is that the institutionalist argument comes back again: As all major positions in the security apparatus are staffed by members of the royal family, monarchs can better control their security forces, and ensure that they use only moderate repression. Moreover, in many of the region's republics, the military has its own economic bases ("Military, Inc."). In contrast, the security forces of the monarchies are much more dependent on the state budget (Hertog 2011, Springborg 2011). This dependence on state funding may translate into more political control over the military. Alternatively, monarchs have more options for "scapegoating" and can more easily replace unpopular prime ministers (like, e.g. in Jordan or Kuwait), or offer small liberalization steps towards political competition (Quatar, United Arab Emirates), and can thus offer sticks *and* carrots.

The caveats of our study are clear: We do not seek a universal theory of repression and violence. All conclusions only pertain to the MENA region, a region with very few democracies. If more democracies are included in the sample, the u-shape may turn into a more complex form, with democracies witnessing less upheaval without repression.

Our study has equivocal policy consequences, and shows how complex foreign policy decisions to promote peace are. The common western practice to train and equip the security forces of 'friendly' autocratic regimes enhances their effectiveness, and may reduce political violence in the short term. However, this seemingly easy and successful solution generates a 'tyrannical peace' (Davenport 2007b) that rests on shaky foundations – leaving the path of moderate repression either towards more or towards less repression causes political violence. Moreover, the long-term prospects for democratization are reduced. On the other hand, advocating the reduction of repression measures may increase political violence in the short term if the legitimacy of the regime is not strengthened at the same time. Thus, the pessimistic conclusion from our study is that transitions to democracy and the strengthening of political freedoms may often imply periods of political violence.

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Supporting Information

Additional Supporting Information may be found in the online version of this article:

Table S1: Variables used. Description and sources. Upper panel: Dependent variables. Lower panel: Independent variables.

Table S2: Robustness Checks.

Figure S1: Repression and Conflict-Index across time and countries.

Figure S2: Difference between dummy and squared model.

Daniel Bischof is a PhD candidate at the University of Leicester (UK) and a visiting scholar at the University of California San Diego (USA). His major research interests lie in the field of comparative politics comprising questions of policy responsiveness, the impact of protest, party politics, strategies of niche parties and quantitative methods. He currently carries out his PhD thesis within the ResponsiveGov project under the supervision of Laura Morales. *Address for Correspondence:* PhD candidate, Department of Politics & International Relations, University of Leicester (UK); E-mail: db308@le.ac.uk

Simon Fink is assistant professor for comparative politics at the University of Bamberg. His research focuses on policy diffusion, politics and religion, and technology policy. *Address for Correspondence:* Assistant Professor, Chair of Comparative Politics, University of Bamberg (DE); E-mail: simon.fink@uni-bamberg.de

