Filtering revolution: Reporting bias in international newspaper coverage of the Libyan civil war

Matthew A Baum

John F Kennedy School of Government, Harvard University

Yuri M Zhukov

Department of Political Science, University of Michigan

Abstract

Reporting bias – the media's tendency to systematically underreport or overreport certain types of events – is a persistent problem for participants and observers of armed conflict. We argue that the nature of reporting bias depends on how news organizations navigate the political context in which they are based. Where government pressure on the media is limited – in democratic regimes – the scope of reporting should reflect conventional media preferences toward novel, large-scale, dramatic developments that challenge the conventional wisdom and highlight the unsustainability of the status quo. Where political constraints on reporting are more onerous – in non-democratic regimes – the more conservative preferences of the state will drive the scope of coverage, emphasizing the legitimacy and inevitability of the prevailing order. We test these propositions using new data on protest and political violence during the 2011 Libyan uprising and daily newspaper coverage of the Arab Spring from 113 countries. We uncover evidence of a status-quo media bias in non-democratic states, and a revisionist bias in democratic states. Media coverage in non-democracies underreported protests and nonviolent collective action by regime opponents, largely ignored government atrocities, and overreported those caused by rebels. We find the opposite patterns in democratic states.

Keywords

Arab Spring, Libya, political communications, regime type, reporting bias, text analysis

What drives media coverage of armed conflict? Do news outlets in different countries respond to the same events in the same ways? Or do they filter information according to the preferences of the political regimes to which they belong? Regime-based reporting bias – distinct from the purported ideological bias in media coverage of domestic politics (Gentzkow & Shapiro, 2010; Baum & Groeling, 2008) – is a persistent challenge for participants and observers of conflict. To political actors, media reports provide information on the performance and strength of an incumbent regime, the costs of collective action, and the benefits offered by the opposition. The press also informs scholarship, generates data, and shapes the public and academic debate about the nature of a crisis and the interests at stake (Schrodt, 2012). To the

extent that systematic differences exist in media reporting of political events, they may carry important consequences for public knowledge, policy, and scientific inference (Bennett, Lawrence & Livingston, 2007; Hallin & Mancini, 2004; Iyengar & Kinder, 1987; Livingston & Bennett, 2003; McCombs & Shaw, 1972).

We argue that news coverage of a conflict depends on an interaction of two factors: the type of event that occurs on the ground and the political context in which a news organization is based. Using new data on the 2011 Libyan uprising and daily newspaper reports from

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Corresponding author:
zhukov.yuri@gmail.com

113 countries, we uncover evidence of a status-quo (i.e. pro-regime) media bias in non-democratic states, and a revisionist (i.e. pro-rebel) bias in democratic states. Consistent with an authoritarian interest in delegitimizing political opponents and dissuading emulation efforts at home, news media in non-democratic states underreported protests and nonviolent collective action by regime opponents, largely ignored government atrocities, and overreported those committed by rebels. We find the opposite patterns in democratic states.

This article begins with an overview of existing research on reporting bias, and our own theoretical expectations about wartime news coverage. Section two describes our data on foreign policy newspaper coverage and political violence in Libya. Section three examines the empirical relationship between news coverage and a range of covariates at the newspaper, daily, and country level. Section four evaluates these results in the context of broader academic and policy debates on media bias and political unrest, and identifies several directions for future research.

Reporting bias and collective action

Reporting bias – the tendency to systematically underreport or overreport certain types of events – shapes our understanding of war.[1] In addition to producing much of the information available to government agencies, protesters, and rebels, news organizations generate the text corpora social scientists use to study political movements. Since Galtung & Ruge (1965: 65) first asked 'how events become news' in the pages of this journal, an increasingly large share of social science data has come to rely on content generated by news organizations.[2] If media sources provide divergent accounts of domestic and interstate conflict, then this divergence should be highly consequential for theory and practice (Snyder &

Kelly, 1977; Schrodt, Simpson & Gerner, 2001; Reeves, Shellman & Stewart, 2006). Despite efforts to address reporting bias, recent analyses of media-generated data continue to reveal striking disparities where we should expect similar trends (Schrodt, 2012: 552).[3]

The current study takes a deeper look at reporting bias – not as a statistical nuisance, but as a theoretically important outcome in its own right. We consider two sources of bias: 'newsworthiness' and politics. The first originates from the commercial preferences of reporters and editors, who seek to maximize readership. The second reflects the political preferences of incumbent governments, who seek to maintain power. These two sets of preferences are often in conflict, and the types of events that receive coverage depend on the press freedoms a country's political system permits.

To maximize readership, news organizations privilege stories that are both surprising and salient to the intended audience (Galtung & Ruge, 1965: 67). Empirical evidence suggests that unexpected, rare or counterintuitive events tend to garner more coverage than events lacking such characteristics (Snyder & Kelly, 1977; Graber, 1997; Earl et al., 2004). In a recent study of major uses of force, for example, Baum & Groeling (2010a) found that criticism of the US president by members of his party received significantly more coverage than criticism by the opposition.

Of course, not all novel events are equally salient. Media organizations tend to report more heavily on large-scale, dramatic events (Woolley, 2000; Davenport & Stam, 2006) and those involving conflict or 'bad news' (Patterson, 1996; Sabato, 1991; Baum & Groeling, 2010a). Additional factors include physical and cultural proximity (Morton & Warren, 1992; Rosengren, 1974), with greater attention reserved for stories in certain parts of the world (Hafner-Burton & Ron, 2013), and in certain parts of a country, such as urban centers (Danzger, 1975). Journalists and media consumers also tend to lose interest in a conflict over time. Barring a substantial or surprising development, like the US troop surge in Iraq, this 'coverage fatigue' generates a secular downward trend in the volume of war reporting (Davenport & Stam, 2006; Baum & Groeling, 2010b).

If journalistic perceptions of 'newsworthiness' are the leading drivers of media coverage, then we should expect relatively little cross-national variation in the types of events that become news (Galtung & Ruge, 1965: 68) – news

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[1] Snyder & Kelly (1977) distinguish between two types of reporting bias: selection (differential completeness of reporting across different classes of events) and content (differential interpretation of events). We restrict our focus to the former – the probability that certain types of events are reported.

[2] Through a variety of manual and automated techniques, scholars routinely scour news reports to ascertain the timing, location, agency, and other characteristics of violent events. COPDAB is an example of a manually coded event dataset (Azar, 1980); examples of automated coding systems include KEDS (Schrodt & Gerner, 1994), VRA-Reader (King & Lowe, 2003), and the CAMEO ontology (Gerner, Schrodt & Yilmaz, 2009); the current iteration of Militarized Interstate Disputes relies on a combination of the two methods (Landis et al., 2011).

[3] These innovations include new methods of sample selection, filtering, and scaling. See Earl et al. (2004); Schrodt (2007).

outlets everywhere should generally favor novel, large-scale developments that represent a change from the status quo. Yet news organizations are not the only arbiters of newsworthiness. The state in which a media firm is based may have its own preferences about the appropriate breadth, depth, and emphasis of news coverage, particularly when the subject is politically sensitive – as civil unrest and war surely are. The extent to which states impose these preferences varies, although non-democratic regimes are particularly hostile to press freedom (Egorov, Guriev & Sonin, 2009).

A state may shape the news agenda in one of three ways. The first is through direct ownership and control of media sources (Djankov et al., 2003; Enikolopov, Petrova & Zhuravskaya, 2011). While 3.5% of newspapers are publicly owned in an average democratic state, the corresponding percentage among non-democracies is nearly seven times higher, at 23.1%.[4] Second, a state may regulate the activity of privately owned media through indirect forms of influence, such as licensing requirements, taxation, and laws limiting certain forms of expression (Whitten-Woodring & James, 2012). Freedom House designated only 2% of non-democracies as having a 'Free' media environment in 2011, compared to 55% of democracies (Freedom House, 2011). Third, states may promote norms by which media owners and journalists face strong incentives to self-censor and avoid 'watchdog' reporting of potentially sensitive topics (Bennett, Lawrence & Livingston, 2007; Schudson, 2003; Djankov et al., 2003). To maintain working relationships with government patrons and sources, knowing when to 'sit on a story' can be as valuable as 'getting the scoop'.

Traditional print and broadcast journalism, of course, do not represent the full spectrum of contemporary media environments, which also include online social media, blogs, and forums. Research on democratic states has shown that markets for alternative information sources emerge where consumer confidence in traditional media is low, and differences between online and offline media content are greater where censorship of offline media is high (Romanyuk, 2011). Opportunities for such substitution, however, remain scarce in non-democracies, where internet access is generally more limited – reaching an average of 27% of the population, compared with 55% in democracies (International Telecommunication Union, 2014) – and censorship is

relatively high (Rød & Weidmann, 2015) – the OpenNet Initiative found evidence of substantial or pervasive internet censorship in 61% of non-democracies, compared with 25% of democracies. Moreover, even where citizens have ready access to uncensored online information, recent research (Zuckerman, 2013) suggests the overwhelming majority of news consumption – 97% on average across the ten nations with the largest Internet consuming populations – is domestically sourced. This suggests that the same regime effects we anticipate for traditional media most likely also prevail online.

How do commercial and political sources of reporting bias interact to shape coverage of conflict? Recent research has shown that – even in very repressive regimes – censorship does not apply uniformly to all types of political unrest (Stein, 2013). For instance, the highly authoritarian regime in Qatar – which in November 2012 sentenced a poet critical of the regime to life in prison (*New York Times*, 2012) – allows satellite television station Al Jazeera to flourish, free from state censorship. In a recent study of the Chinese blogosphere, King, Pan & Roberts (2013) show that Beijing moves quickly to suppress language that may potentially mobilize collective action, but permits other forms of political speech and regime criticism.

Protest and rebellion represent classic collective action problems, where participation is individually costly, benefits are non-excludable, and individuals prefer to free ride on the contributions of others. While both democrats and autocrats prioritize political survival, the price of losing power is greater for dictators than elected officials (Debs & Goemans, 2010). For this reason, non-democratic leaders face strong incentives to suppress any collective action that might result in a change of government.

Information on collective action tends to promote further collective action (Lohmann, 2002). Media coverage of such activities – and the number of participants involved – increases public awareness of a regime's performance and transmits informational cues about the extent of popular discontent (Lohmann, 1994; but see Crabtree, Darmofal & Kern, 2015) and the regime's willingness and capacity to repress (Stein, 2013). Such coverage breaks the appearance of an inevitable status quo, raises the opposition's expected share of support, and constrains potential government responses (Kuran, 1989). Confronted with a highly visible protest movement, embattled governments face a stark choice between tolerance – which reduces the expected costs of opposition – or repression – which can invite backlash mobilization (Francisco, 2004). Either way,

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[4] 'Democracy' is here defined as a Polity2 score of 6 or higher (Jaggers & Gurr, 1995).

news coverage of a social movement may not only facilitate mobilization, but also legitimize it (Gamson & Wolfsfeld, 1993).

Not all forms of collective action are necessarily threatening to non-democratic regimes. An emerging literature has argued that limited media freedom can be a useful source of corrective feedback for autocratic rulers. Media coverage of protests directed at local officials, for instance, may help a central government monitor the performance of subordinates (Egorov, Guriev & Sonin, 2009).

Mobilization against peer autocratic regimes, however, potentially is more dangerous. Successful contention in one state, through its example, can raise the opposition's expectations that state authority could be successfully challenged. As individuals update their priors about the resilience of seemingly powerful regimes, they become more likely to attempt emulation efforts at home. Scholars have observed such dynamics during the post-communist 'color' revolutionary movements (Beissinger, 2007), and in earlier waves of regime contention (Weyland, 2009).

Foreign political upheavals can generate additional incentives for reporting bias due to the relative difficulties of independent verification (Gentzkow & Shapiro, 2005). Government manipulation of the news – direct or indirect – is commonly recognized as possible but cannot be easily observed (Edmond, 2011). A consumer may seek to verify, at a cost, the information she receives from traditional media. Yet these costs are relatively high if the events' participants are foreign nationals, and there is little information transmission through informal family and social networks (Francisco, 2004). Although alternative media sources not as easily controlled by the state (e.g. internet news, blogs, Tweets) may offer citizens some means to overcome closed communications, verification remains more difficult than in cases of domestic protest and rebellion, where ex post feedback is more immediately available.

In sum, the nature of reporting bias depends on how media organizations navigate the political context in which they are based. Where government pressure on the media is limited – as in most democratic regimes – the scope of reporting should reflect the 'true' preferences of media organizations, most of which are privately owned and typically follow the traditional journalistic standards of newsworthiness to maximize audience attention and revenue. In military conflicts, these preferences generate disproportionate coverage of surprising, dramatic developments that challenge the conventional wisdom and, *ceteris paribus*, privilege change over the status quo. As one prominent journalist observed, stories 'like the plane took off and flew safely [are] not really news unless that were a big change'.[5]

Where political constraints on reporting are more onerous – as in non-democratic regimes – the conservative preferences of the state will wield greater influence over the scope of coverage. These favor emphasis on the legitimacy and inevitability of the prevailing order, or, stated differently, coverage of the planes that take off and then safely land.

In a revolutionary context like the Arab Spring, the media–government interaction should produce two distinct patterns of news coverage. In democracies, news coverage should reflect the commercial preferences of publishers and journalists, emphasizing change over the status quo. In non-democracies, where government ownership and influence over the media is more extensive, news coverage should reflect regime preferences for political self-preservation, emphasizing the stability of the status quo.

> *Hypothesis 1:* Relative to media outlets in democracies, news organizations in non-democracies will offer less coverage during periods favorable to the challenger (e.g. after nonviolent protests and government abuses of civilians) and more coverage during periods favorable to the incumbent (e.g. after civilian victimization by rebels).

This hypothesis, summarized graphically in Figure 1, does not imply that media organizations in democratic states are entirely immune from state influence, or that state and media interests must necessarily be in constant conflict. Wartime restrictions on reporting are common in democratic states, either through direct government censorship (Roeder, 1995; but see Hallin, 1989) or through self-imposed limitations (Bennett, Lawrence & Livingston, 2007) and 'rally-round-the-flag' effects (Groeling & Baum, 2008). These restrictions will not necessarily negate the media's preference for change over the status quo and, in some cases, state and media preferences may align. In other instances, their preferences will diverge, as when democracies support incumbent regimes over rebel groups seeking to overthrow them. A case in point is Afghanistan, where the United States has supported the incumbent regime of Hamid Karzai against the Taliban insurgency.

One alternative explanation is that reporting bias depends less on regime type than on political-military

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[5] ABC News Washington Bureau Chief Robin Sproul, quoted in Baum & Groeling (2010a: 24).
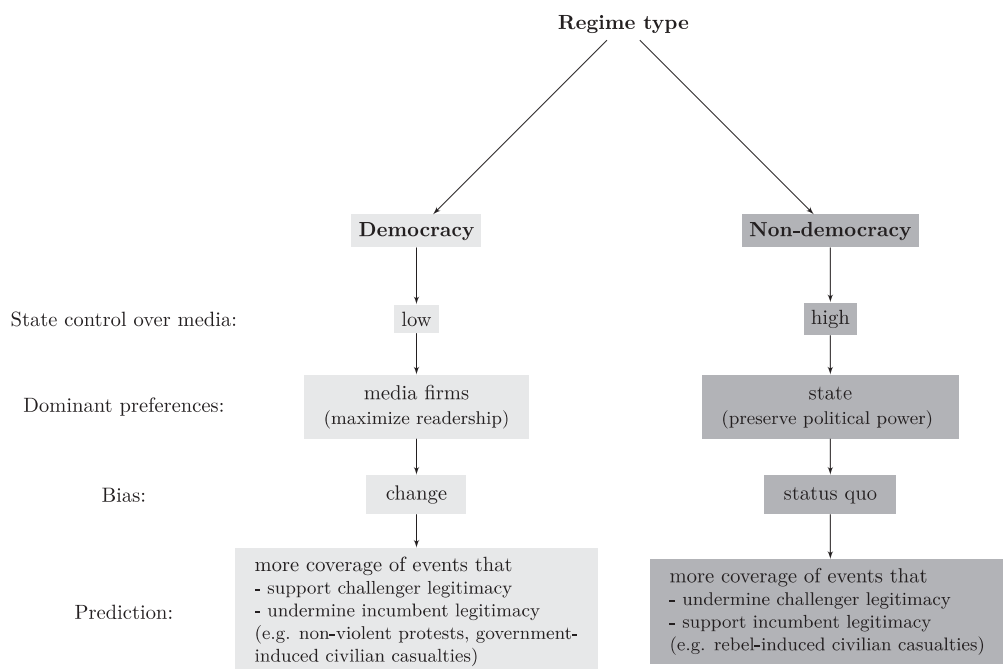
Regime type

Figure 1. Theoretical predictions

alliances. By this logic, democracies may have a pro-status quo bias where they have made commitments to the regime, and a pro-change bias where they have allied with rebels. We consider this possibility below.

Libya civil war and newspaper coverage data

The 2011 Libyan Civil War offers a unique opportunity to test these propositions. The popular uprising against the regime of Colonel Muammar Gadaffi and the subsequent NATO intervention represent the type of unexpected development that media organizations are likely to find 'newsworthy' but non-democratic governments may find threatening. The relatively short duration of the Libyan crisis (less than one year, from the beginning of protests to the overthrow of Gadaffi) enables us to track news coverage over the full course of the uprising, with less contamination by coverage fatigue than we might find in more protracted conflicts, like the civil war in Syria.

More importantly, the Libyan case presents a hard test for theories of censorship and media bias. The conflict occurred during the height of the Arab Spring when international media attention was concentrated on North Africa and the Greater Middle East, and abundant offline and online social media amplified voices underrepresented in print and broadcast journalism. Because the costs of verifying suspicious or incomplete news reports were relatively low and the probability of credibility-damaging

falsification was high, governments and media firms should have felt relatively few incentives to misrepresent the nature of events on the ground (Gentzkow & Shapiro, 2005; Edmond, 2011). If we observe a democratic/non-democratic divergence in reporting during such a high-visibility crisis, we can expect this relationship to hold under less onerous circumstances.

To test these propositions, we construct a new dataset from 213,406 articles published by 2,252 newspapers in 113 countries between 18 December 2010 (the first day of protests in Tunisia, which ignited the Arab Spring) and 23 October 2011 (three days following the capture and death of Muammar Gadaffi). While news coverage certainly appears in various forms of electronic and print media, we confine our current focus to newspapers for three reasons. First is newspapers' international prevalence as primary sources of information on political, economic, and social events. In 2011, there were three times as many daily newspaper readers as broadband internet users – 1.7 billion to 580 million worldwide (World Association of Newspapers and News Publishers, 2014). Although the revenues and readership of print media have declined in recent years, a disproportionate share of online news still originates with newspapers – in March 2013, seven of the ten most popular online news sources either *were* online versions of print newspapers or featured aggregated content from online newspapers (eBusiness Guide, 2013).

Second, a focus on newspapers enables us to collect a relatively consistent and representative data sample across the largest possible set of countries. Internationally, newspapers come in three basic formats (i.e. broadsheet, Berliner, and tabloid), face similar space constraints, and generally cater to more specialized, local audiences than wire services and cable news. Foreign newspaper articles also remain more extensively archived in electronic databases than broadcast transcripts, permitting us to maximize the geographical scope of our study.

Third, newspaper-based event data have a long tradition in the study of social movements (Earl et al., 2004). Where government and NGO data on violence and protest were unavailable or unreliable, newspapers and eyewitnesses have generally offered our *only* empirical records of conflict events. A focus on newspapers permits some continuity between our findings and previous work.

Figure 2 presents our sample of 113 countries. For each country, we conducted a census of all daily and weekly newspapers listed in the electronic databases Lexis-Nexis and ISI Emerging Markets. We identified a universe of 2,252 unique and active (i.e. currently in press) newspapers, excluding weekend supplements, inserts, evening editions, and similar associated materials.

For each newspaper, we collected every unique article containing the term 'Libya' (in English or the newspaper's source language) published between 18 December 2010 and 23 October 2011. Of the aforementioned 213,406 such articles, 11,781 (6%) are opinion pieces and 201,193 (94%) are news stories. Figure 3 shows their distribution by regime type and region.

Because news coverage of conflict is by necessity event-driven, we sought to formally account for the day-by-day dynamics of those events. We did so by collecting incident-level data on the type, intensity, and lethality of insurgent and government violence within Libya. To avoid overlap with our newspaper corpus, we relied on a mutually exclusive ensemble of electronic sources and newswires, including *Al Jazeera, BBC News, CNN, Reuters, RIA Novosti, Xinhua*, and several dozen others. Following best practices in conflict studies (Reeves, Shellman & Stewart, 2006), we constructed our events dataset from a regionally diverse set of news agencies to offset underreporting in any single source, and drew on media with relatively few space- and advertising-related limitations on the volume of information published.

For each of 1,510 unique events identified during the window of observation, we recorded its location, timing, participants (unarmed civilians, armed rebels, government police or military forces, NATO), type (protest, arrest, use of ground force, use of artillery or air power), technology of

violence (selective vs. indiscriminate), and casualties (wounded and killed, grouped by target and perpetrator).

We aggregated the newspaper and violence data into three levels of analysis: country, country-day, and newspaper-day. For the newspaper-day data, we created a dummy variable, $Publish_{ijt}$, coded 1 if newspaper i in country j decided to publish an article on Libya on day t, and 0 otherwise. We created an analogous variable at the country-day level, $Publish_{jt}$, coded 1 if at least one newspaper in country j published an article on Libya on day t. At the country level, the outcome variable is the proportion of newspapers (by country) that ran a Libya story on days following each of three types of events: nonviolent protests, rebel-induced civilian deaths, and government-induced civilian deaths. Formally,

$$\text{Coverage}_j = 1/T_{(z)} \sum_{\tau} \tau_{(z)} (1/i \sum_i \text{Publishing}_{ij\tau} \tau_{(z)})$$

(1)

where $\tau(z) \in \{1, \ldots, T(z)\}$ indexes the set of days following an event of type $z \in \{$nonviolent protest, rebel-induced civilian casualties, government-induced civilian casualties$\}$, i indexes the newspaper, and j indexes the country.

We measure democracy in several ways. First, we use a country's Polity2 score – an aggregate measure that runs from –10 (full autocracy) to +10 (full democracy) (Jaggers & Gurr, 1995). Following convention, we use a cutoff of +6 or higher as a democracy indicator in the results below, but provide a sensitivity analysis in the online appendix with alternative cutoffs (+4 to +8).[6] Second, we use Freedom House's Press Freedom scores – which range from 0 to 100, with lower numbers representing more freedom (Freedom House, 2011). Unlike the more general Polity variable, this measure speaks more directly to government restrictions on speech and expression.[7] Third, we used the Cingranelli & Richards (2010; CIRI) 'Freedom of Speech' measure, which indicates the extent to which freedoms of speech and press are affected by government censorship, including ownership of media outlets.[8] These measures are strongly correlated with each other.[9] Yet by testing our hypothesis with three different measures

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[6] The Polity IV team recommends treating a Polity2 score of +6 as a lower bound for democracy.

[7] We used Freedom House's 'Free' (0 to 30) and 'Partly Free' (31 to 60) designations, separately, as measures of democracy.

[8] We used values of 2 ('no censorship') and 1 ('some censorship') as measures of democracy.

[9] The pairwise Pearson correlation coefficient is –0.8 for Polity2 and Freedom House, 0.7 for Polity2 and CIRI, and –0.8 for Freedom House and CIRI.
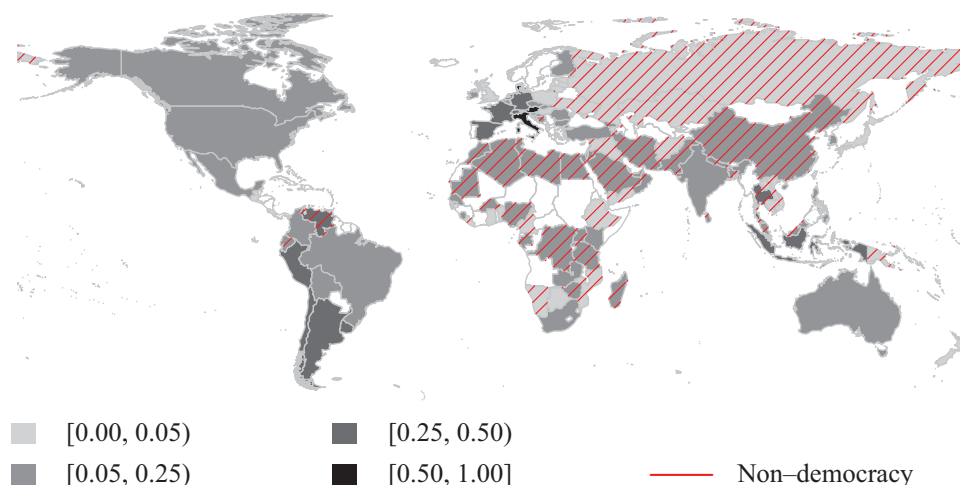
Figure 2. Libya news coverage data
Frequency of newspaper reports on Libyan crisis. Shadings correspond to proportion of newspaper-days with at least one article published.
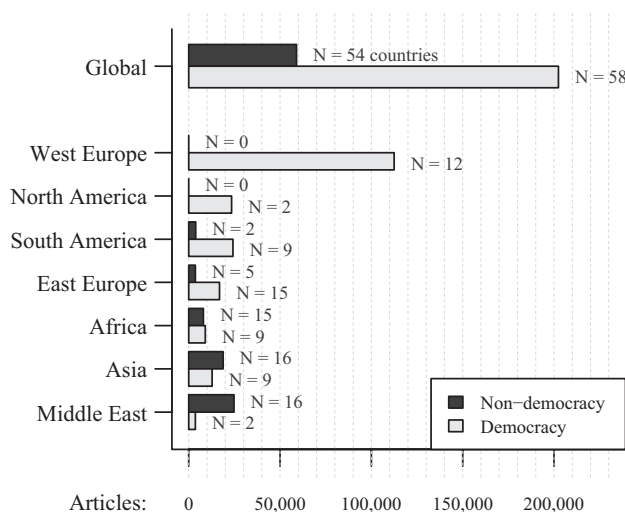

Figure 3. Number of Libya newspaper articles, by regime type and region
Numbers next to bars represent number of countries in each group.

of democracy and freedom of the press – and multiple thresholds within each measure – we can have more confidence in the robustness of our results. Due to space constraints, we focus on the Polity variable below and report full results in the online appendix.

In addition to the variables described above, we collected several country-level controls, including wealth, geographic distance from Libya, internet access, internet censorship, education, and domestic conflict history. In the online appendix we provide a full list of variables considered, their levels of measurement, summary statistics, and source documentation.

Descriptive statistics

What does an initial glance at the data tell us about differences in reporting between democratic and non-democratic states? During our period of observation, the average country saw 1,889 newspaper articles about Libya – approximately six per day. Their distribution, however, was far from uniform. Given the newsworthiness preferences that prevail among relatively free, market-oriented media, we would anticipate more coverage of the Libya conflict, all else equal, in democracies. In fact, this is what we find. Although the countries in our sample were about evenly split between democracies and non-democracies – 52% to 48% – democratic states accounted for a full 86% (183,726 of 213,406) of all published articles.[10] This imbalance is partly due to the vastly more developed media markets of democracies. The average democracy was home to 18–19 daily newspapers, while the average non-democracy had 7–8. Yet even within individual newspapers, the divide was apparent. On any given day, an average newspaper in a democratic country had a 10% chance of publishing at least one story on Libya. In non-democratic states, this figure was 7%.[11]

Beyond a consistently lower volume of coverage, the editorial choices of newspapers in non-democracies were more homogenous. On any given day, newspapers in

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[10] Democracy is here defined as a Polity2 score of +6 or higher.
[11] $E[Publish_{ijt} \mid Democracy_j = 1] = 0.101$, $E[Publish_{ijt} \mid Democracy_j = 0] = 0.073$. Kolmogorov-Smirnov test statistic D = 0.0272, p-value < 2.2e–16.
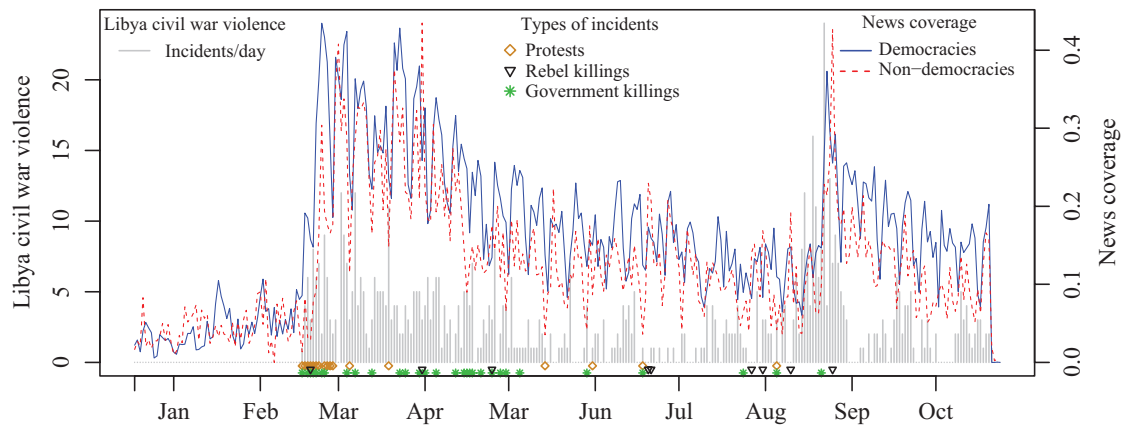
Figure 4. Libyan civil war violence and news coverage

Gray vertical bars represent daily event counts of civil war violence. Orange diamonds, black triangles, and green asterisks indicate, respectively, whether a nonviolent protest, rebel killings of civilians or government killings of civilians occurred on day *t*. Blue solid and red dotted lines represent proportions of newspapers running a story on Libya on day *t* in democracies and non-democracies, respectively.

non-democratic states were significantly more likely than newspapers within democracies to reach the same decision on whether or not to cover Libya. News coverage in democratic states was both more frequent and more diverse.[12]

On what sorts of days were newspapers likely to run stories about Libya? Newspapers in both types of countries shared a preference toward reporting on large-scale events, and tended to publish stories following days of heavy fighting. Coverage of Libya following above-average levels of civil war violence was 72% higher than following below-average levels of fighting. This increase was greater in democracies than non-democracies – a 75% versus 60% gain – but the response was in the same direction.

The similarities end, however, once we take a deeper look at coverage following specific types of events. Consistent with our expectations (Figure 1), newspapers in democratic states were significantly more likely to publish stories following protests. The average proportion of newspaper-days with coverage after nonviolent protests was 0.08 for non-democracies, but over twice as high, 0.22, for democracies.[13] Non-democratic press generally covered Libya after below-average levels of protest, highlighting a cautious approach toward expressions of collective action.

A further disparity can be seen in coverage of civilian victimization. Newspapers in democratic states were more likely to run Libya stories following government atrocities, while those in non-democratic states were more sensitive to anticivilian violence by rebels. Non-democracies saw an average of 0.11 newspaper-days with coverage after government killings of civilians, compared to 0.22 for democracies.[14] These relative proportions flipped after rebel abuses of civilians: 0.18 for non-democracies and 0.16 for democracies.[15]

These patterns are visible in Figure 4, which shows several overlapping time series. The first is the total number of violent civil war events in Libya per day (grey vertical bars). The second is an indicator of whether specific types of violent events occurred on a given day: nonviolent protests (orange diamonds), rebel killings of civilians (black triangles) and government killings of civilians (green asterisks). The third is daily levels of newspaper coverage of Libya by democracies (solid blue line) and non-democracies (dashed red line) – measured as the proportion of country's newspapers running a story on Libya per day, averaged over all countries within each regime type.

Several patterns are apparent from Figure 4. First, the level of newspaper coverage across all regimes is event-driven – high levels of coverage followed high levels of civil war violence. Second, coverage was consistently higher in democracies than non-democracies, with the solid line

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[12] We obtained this finding through normalized Shannon entropy scores of coverage decisions over time by newspapers in democratic and non-democratic countries (Boydstun, 2013: 119). We provide a description of the method and full results in the appendix.

[13] Kolmogorov-Smirnov test statistic is 0.48, with p < 2.2e–05.

[14] Kolmogorov-Smirnov test statistic is 0.39, with p < 0.001.

[15] Kolmogorov-Smirnov test statistic is 0.17, with p > 0.1.

almost always above the dashed one. Third, non-democratic news coverage declined on days following protests and spiked after rebels killed or wounded civilians. This divergence is most pronounced in February and March 2011, when democratic news coverage soared following reports of protests and government repression, but non-democratic news coverage remained stagnant until the first report of rebel-induced civilian deaths.

This differential attention to the military conduct of the warring parties is consistent with our expectations. To the extent that rebel violence against civilians indicates the opposition's incompetence or disregard for the population's safety, increased attention to such incidents underscores the preferability of stability and the status quo. Similar practices by pro-regime forces, meanwhile, may signal the unsustainability or illegitimacy of the status quo.

While general patterns in the data support our argument about a democratic/non-democratic divergence in reporting of protest and rebellion, and our corresponding hypothesis (H1), we would like to draw more general inferences about patterns of news coverage under a variety of counterfactual scenarios. In addition, we want to see if these patterns persist when we control for other factors, such as coverage fatigue, newspaper ownership, and potentially relevant country attributes like internet access, education, and geographic proximity to Libya. To do so, we turn to a more rigorous set of tests.

Empirical analysis

If our theoretical expectations are valid, news coverage following protests and government-induced civilian casualties should be higher in democracies, and coverage after rebel-induced civilian casualties should be higher in non-democracies. To test these propositions, we perform a regression analysis at each level of aggregation. At the country level, we use Beta regression to model the proportion of newspapers running a Libya story after a specific type of conflict event. We use a Beta model because our outcome – $Coverage_j$, as defined in Equation 1 – is continuous and confined to the standard unit interval $(0,1)$.[16] For each of three $Coverage_j$ variables (i.e. after protests, after rebel- and government-induced civilian casualties), we estimate the following equation:

Country

$$g(\mu_j) = \text{Democracy}_j \cdot \alpha + \mathbf{x}_j \beta + u_i \qquad (2)$$

where μ_j is the expected value of $Coverage_j$, g() is a link function, $Democracy_j$ is a binary indicator of whether county j was a democracy in 2010, $\mathbf{x}_j$ is a matrix of covariates and u_i is an error term.

At the country-day and newspaper-day levels, we estimate a series of mixed-effect logit regression models:

Country-day

$$\begin{aligned}
\text{Publish}_{jt} = \text{logit}^{-1}[&\text{Democracy}_j \cdot \alpha + \mathbf{z}_t \theta \\
&+ \text{Democracy}_j \cdot \mathbf{z}_t \gamma + \mathbf{x}_{ij} \beta \qquad (3) \\
&+ \text{Publish}_{j,t-1} \rho + u_j + u_t + \varepsilon_{jt}]
\end{aligned}$$

Newspaper-day

$$\begin{aligned}
\text{Publish}_{ijt} = \text{logit}^{-1}[&\text{Democracy}_j \cdot \alpha + \mathbf{z}_t \theta \\
&+ \text{Democracy}_j \cdot \mathbf{z}_t \gamma + \mathbf{x}_{ij} \beta \qquad (4) \\
&+ \mathbf{W} \cdot \text{Publish}_{i,t-1} \lambda + u_i + u_t + \varepsilon_{it}]
\end{aligned}$$

where the dependent variable, $Publish_{ijt}$, is an indicator of whether newspaper i in country j published a story on Libya on day t.[17] The lower-order interactive term $Democracy_j$ is a binary indicator of whether county j was a democracy in 2010.[18] We consider two vectors of covariates $\mathbf{z}_t$ and $\mathbf{x}_{ij}$. $\mathbf{z}$ includes time-variant measures of conflict intensity (number of protests, civil war violence events, rebel- and government-induced civilian casualties on day t–1).[19] $\mathbf{x}$ includes time-invariant newspaper-level and country-level characteristics (public ownership, distance of country j from Libya, internal conflict years since WWII, education, percentage of population with internet access, number of newspapers in country, and internet censorship). To capture heterogeneity in coverage across different types of regimes, we

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[16] Formally, the model assumes $Coverage_j \sim B(\mu_j, \phi)$, where μ_j are country-level means and ϕ is a constant precision parameter. An additional attractive feature of the Beta regression model is that it naturally accommodates heteroskedasticity and asymmetry in the data (Ferrari & Cribari-Neto, 2004).

[17] On the country-day level, $Publish_{jt}$ indicates whether at least one newspaper in country j publishes a story on Libya on day t.

[18] Unless otherwise specified, the results reported below define democracy as a Polity2 score of +6 or higher. However, alternative measures of regime type and press freedom yielded very similar estimates, as we report in the online appendix.

[19] On the country-day level, $\mathbf{x}$ includes newspaper-specific measures aggregated to the country level (e.g. proportion of publicly owned newspapers in country j, average network size in j).

interact *Democracy* with the covariates in **z**. We also add a linear daily trend to control for coverage fatigue over time.

In addition to the relationships of central theoretical interest, we sought to control for several confounding factors. The first of these involves potential violations of the independence assumption: what newspaper i publishes on day t is probably not independent of what the same newspaper – or others within the same ownership network – published on day t–1. To this end, we include a temporal lag and a time-lagged network autoregressive term $\mathbf{W}\cdot Publish_{i,t-1}$, which represents the proportion of co-owned newspapers that featured a Libya news story on day t–1.[20]

Finally, we cannot exclude the possibility that unobserved heterogeneity in newspapers' (or countries') individual attributes, such as editorial idiosyncrasies, niche market characteristics, and stylistic norms, could simultaneously drive variation in the explanatory variables and the propensity to publish a story on Libya. If such unobserved characteristics are correlated with the error terms of our models, pooled estimation will produce biased parameter estimates. We therefore include newspaper-level, country-level, and temporal random effects (u_i, u_j, u_t) to control for bias induced by this unobserved heterogeneity and to examine variation within and across newspapers and countries, and over time. The results support our expectations in Hypothesis 1, at all levels of aggregation.

At the country level (Table I), democracies experienced a significantly larger volume of coverage following protests and government-caused civilian deaths. Among newspapers in democratic countries, 22% ran a story about Libya on days after protests (95% CI: 16, 29), compared to 10% in non-democracies (95% CI: 6, 15).[21] On days after government abuses of civilians, 25% of newspapers in democracies published a story about Libya (95% CI: 18, 32), compared with 15% in non-democracies (95% CI: 10, 20).[22]

These results hold at all Polity2 cutoffs from +4 to +8, as well as with alternate measures of democracy and free speech. Compared to countries with a Freedom House designation of 'Not Free', those designated 'Partly Free' or 'Free' saw 34% more coverage after protests (CI: +3, +74) and 26% more after government killings (CI: +1, +54). We found similar trends among countries with 'Some' or 'No' government censorship according to Cingranelli & Richards (2010).[23]

Although media in democracies featured relatively less coverage following rebel killings of civilians, the differences – at least on the country level – were not statistically significant.[24]

The contrast becomes starker when we examine the day-by-day dynamics of news reporting (Tables II and III). Figure 5 summarizes the most theoretically relevant empirical relationships for country-day and newspaper-day level data. It reports changes in the predicted probability of a publication on Libya, under counterfactual scenarios where we increase the value of a conflict variable (e.g. number of protests or killings on the preceding day) from its 1st to 99th percentile, holding all other conflict covariates constant at their median values.[25]

As predicted, media firms in non-democracies responded to nonviolent collective action by reducing media coverage, while those in democracies responded by increasing coverage or making no change at all. An increase in Libyan protests from 0 to 3 daily events (1st to 99th percentile) was followed by a 38% decrease (CI: –50.8, –22.3) in the probability that a newspaper in a non-democratic country published a story on Libya. In democracies, the same spike in protests yielded a 14% increase in probability of publication, though the latter increase is not statistically significant at conventional levels (CI: –4.2, +35.1).[26] More importantly, the gap between these two responses – from –38% to +14% – was itself highly significant, with no overlap between confidence intervals. As hypothesized, coverage trends in democracies and non-democracies were significantly different from each other, in degree and kind.

This heterogeneous relationship holds at the newspaper-day level, where a hypothetical increase from zero to three Libyan protests produced a 45%

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[20] $\mathbf{W}$ is a row-normalized connectivity matrix of the ownership network shown in the appendix. On the country-day level, we replace the network autoregressive term with a temporally lagged dependent variable, $Publish_{j,t-1}$.
[21] Simulations based on Model 2. All other variables held constant at their medians (Public ownership = 0, Distance from Libya = 3,817 km, Years of secondary school = 6, Conflict years since 1945 = 1, Percent with internet = 38.7, Number of newspapers = 5).
[22] Simulations based on Model 6.

[23] The corresponding percentage increases are 41 (95% CI: 9, 79) and 25 (90% CI: 1, 53).
[24] Simulations from Model 4 suggest that on days after rebel-induced civilian casualties, 22% of newspapers in democratic countries would publish a story about Libya (95% CI: 16, 29), compared with 28% in non-democratic countries (95% CI: 18, 37).
[25] The median values are Protest = 0, Civilian casualties (by G) = 0, Civilian casualties (by R) = 0, Civil war violence = 1.
[26] Simulations based on Model 7.

Table I. Regression output for country-level data

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coverage after protests		Coverage after civilian victimization by rebels		Coverage after civilian victimization by govt	
(Intercept)	−0.880 (0.349)*	−0.735 (0.353)*	−0.122 (0.424)	−0.077 (0.428)	−0.687 (0.377)†	−0.637 (0.38)†
Democracy	0.313 (0.097)**		−0.086 (0.116)		0.229 (0.108)*	
Polity2 score		0.019 (0.007)*				0.014 (0.008)†
Public ownership	−0.323 (0.176)†	−0.334 (0.184)†	−0.154 (0.243)	−0.244 (0.267)	−0.199 (0.189)	−0.196 (0.200)
Distance from Libya	−1e−5 (1e−5)	−1e−5 (1e−5)	−1e−5 (1e−5)	−1e−5 (1e−5)	−1e−5 (1e−5)	−1e−5 (1e−5)
Conflict years since 1945	0.001 (0.003)	0.002 (0.003)	−0.002 (0.004)	−0.002 (0.004)	0.001 (0.003)	0.002 (0.004)
Years of secondary school	0.012 (0.049)	−0.006 (0.049)	−0.050 (0.056)	−0.050 (0.057)	−0.003 (0.052)	−0.007 (0.053)
Percent w/internet	0.005 (0.002)**	0.007 (0.002)***	0.004 (0.002)	0.003 (0.002)	0.004 (0.002)*	0.006 (0.002)**
Number of newspapers	−0.004 (0.001)**	−0.004 (0.001)**	−0.002 (0.002)	−0.002 (0.002)	−0.003 (0.002)†	−0.003 (0.002)†
ϕ	6.689 (0.969)***	6.431 (0.932)***	4.847 (0.692)***	4.834 (0.695)***	4.699 (0.638)***	4.667 (0.637)***
N	99	98	95	93	107	105
AIC	−171.568	−161.765	−109.264	−104.433	−136.885	−128.642

Beta regression. Dependent variable is $Coverage_j$ (country's proportion of newspaper-days with Libya coverage after conflict event). †$p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table II. Regression output for country-day panel data

Variable	Model 7	Model 8	Model 9	Model 10
(Intercept)	−1.660 (0.128)***	−1.879 (1.063)†	−1.701 (0.136)***	−1.902 (1.365)
Publish (t–1)	2.491 (0.029)***	1.636 (0.032)***	2.460 (0.031)***	1.223 (0.037)***
Democracy	−0.135 (0.041)**	−0.445 (0.302)	−0.138 (0.043)**	−0.488 (0.379)
Protest	−0.190 (0.042)***	−0.237 (0.043)***	−0.189 (0.075)*	−0.276 (0.110)*
Democracy*Protest	0.240 (0.055)***	0.342 (0.059)***	0.239 (0.056)***	0.405 (0.062)***
Civil war violence	0.070 (0.007)***	0.106 (0.007)***	0.082 (0.014)***	0.141 (0.021)***
Democracy*Violence	0.005 (0.010)	0.016 (0.011)	0.003 (0.010)	0.010 (0.011)
Civilian casualties (by R)	0.026 (0.006)***	0.030 (0.007)***	0.028 (0.013)*	0.035 (0.019)†
Democracy*Civilian (R)	−0.029 (0.009)**	−0.028 (0.010)**	−0.030 (0.009)**	−0.029 (0.010)**
Civilian casualties (by G)	4e–4 (0.001)	4e–5 (0.001)	2e–4 (0.001)	−3e–4 (0.002)
Democracy*Civilian (R)	0.001 (0.001)	0.002 (0.001)†	0.001 (0.001)	0.002 (0.001)*
Public ownership	−0.183 (0.075)*	−0.589 (0.600)	−0.183 (0.076)*	−0.663 (0.754)
Distance from Libya	−4e–5 (4e–06)***	−5e–5 (3e–5)	−5e–5 (4e–6)***	−6e–5 (4e–5)
Conflict years since 1945	0.005 (0.001)***	0.007 (0.010)	0.005 (0.001)***	0.009 (0.012)
Years of secondary school	−0.074 (0.017)***	−0.042 (0.146)	−0.084 (0.017)***	−0.062 (0.187)
Percent w/internet	0.012 (0.001)***	0.020 (0.006)***	0.013 (0.001)***	0.025 (0.007)***
Number of newspapers	0.027 (0.001)***	0.023 (0.005)***	0.031 (0.001)***	0.029 (0.006)***
Time	2e–5 (2e–4)	9e–5 (2e–4)		
Var(u_j)		1.614		2.558
Var(u_t)			0.372	0.962
N	33,790	33,790	33,790	33,790
AIC	31,029.200	27,442.620	30,066.420	25,280.940

Mixed effects logit specification. Dependent variable is *Publish$_{jt}$* (publication of article on Libya). †$p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table III. Regression output for newspaper-day panel data

Variable	Model 11	Model 12	Model 13	Model 14
(Intercept)	−1.856 (0.04)***	−2.159 (0.653)**	−2.123 (0.065)***	−2.624 (0.708)***
W*Publish (t–1)	2.854 (0.016)***	2.709 (0.026)***	2.536 (0.017)***	1.694 (0.028)***
Democracy	0.651 (0.017)***	1.347 (0.209)***	0.684 (0.018)***	1.550 (0.225)***
Protest	−0.205 (0.025)***	−0.275 (0.028)***	−0.198 (0.078)*	−0.299 (0.112)**
Democracy*Protest	0.200 (0.026)***	0.268 (0.029)***	0.225 (0.027)***	0.354 (0.033)***
Civil war violence	0.069 (0.003)***	0.102 (0.003)***	0.104 (0.014)***	0.158 (0.021)***
Democracy*Violence	0.009 (0.003)**	0.028 (0.004)***	0.011 (0.004)**	0.034 (0.005)***
Civilian casualties (by R)	0.050 (0.002)***	0.078 (0.003)***	0.057 (0.013)***	0.092 (0.019)***
Democracy*Civilian (by R)	−0.049 (0.003)***	−0.074 (0.003)***	−0.048 (0.003)***	−0.078 (0.003)***
Civilian casualties (by G)	−4e–4 (3e–4)	−0.001 (4e–4)*	−0.001 (0.001)	−0.001 (0.002)
Democracy*Civilian (by G)	0.001 (3e–4)**	0.002 (4e–4)***	0.001 (3e–4)***	0.002 (4e–4)***
Public ownership	0.029 (0.021)	0.255 (0.297)	0.046 (0.021)*	0.292 (0.320)
Distance from Libya	−6e–5 (1e–6)***	−9e–5 (2e–5)***	−6e–5 (1e–6)***	−1e–4 (2e–5)***
Conflict years since 1945	−0.024 (3e–04)***	−0.066 (0.004)***	−0.026 (3e–04)***	−0.072 (0.005)***
Years of secondary school	−0.007 (0.005)	−0.061 (0.088)	−0.006 (0.005)	−0.073 (0.095)
Percent w/internet	−0.010 (2e–4)***	−0.034 (0.003)***	−0.010 (2e–4)***	−0.036 (0.004)***
Time	−4e–4 (5e–5)***	−0.001 (6e–5)***		
Var(u_j)		8.495		9.954
Var(u_t)			0.508	1.102
N	682,930	682,930	682,930	682,930
AIC	370,460.111	244,640.540	355,353.333	218,701.921

Mixed effects logit specification. Dependent variable is *Publish$_{ijt}$* (publication of article on Libya). †$p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.
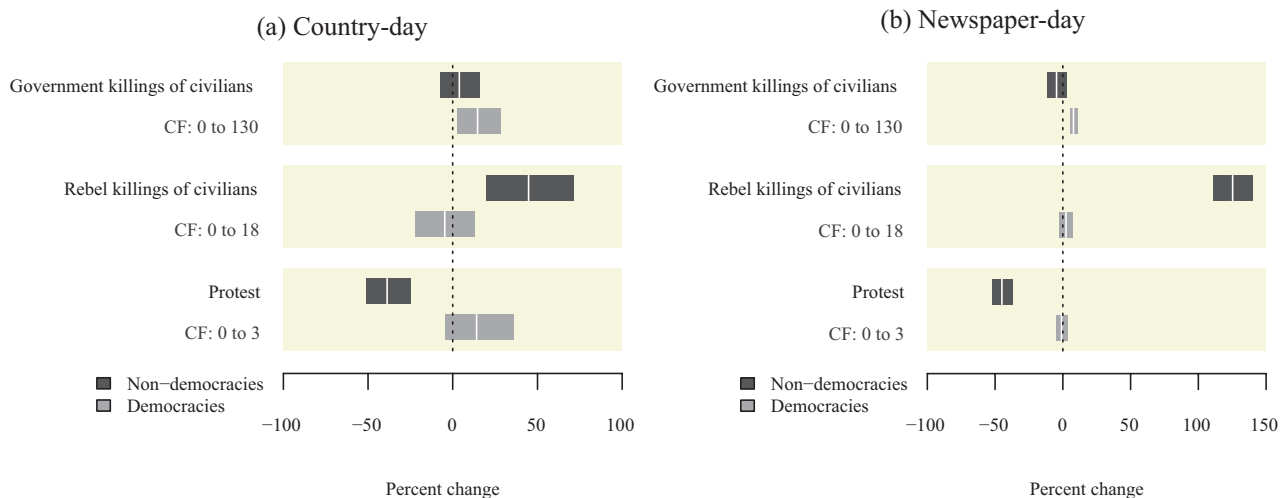
Figure 5. Percentage change in probability of Libya coverage

Quantities reported have the following interpretation: How much more/less likely is the publication of an article about Libya on day *t* if the number of conflict events **z** on day *t*–1 were increased from the 1st to the 99th percentile. Actual values associated with this counterfactual are provided as 'CF: [1st percentile] to [99th percentile]'. White vertical stripes are point estimates. Gray bars are 95% confidence intervals.

drop (CI: –52, –37) in the probability of an article about Libya among newspapers in non-democratic states. In democracies, the same counterfactual yielded no significant change in probability (–1.2, CI: –5.2, +3.4).[27] As before, the gap between democratic and non-democratic responses to protest was substantial and highly significant.

We also find differences in reporting after civilian victimization, depending on which actors inflicted the violence. The probability of Libya coverage in non-democracies rose by 47% (95% CI: +22.7, +72.8) following a spike in rebel-induced civilian deaths from 0 to 18 (1st to 99th percentile). Media outlets in democracies were less responsive to rebel abuses, with a statistically insignificant 5% decline in coverage (CI: –20.8, +12.6).[28]

These results persist at other levels of analysis. An average newspaper in a non-democratic state saw a sizeable uptick in coverage (+131.1%; CI: +116.7, +145.9) after an increase from 0 to 18 rebel-induced civilian casualties on the previous day. There was no change in coverage among newspapers in democracies (+1.3%; CI: –3.8, +6.3).[29] Once again, the confidence intervals for democracies and non-democracies did not overlap. In 10,000 simulations, the smallest predicted increase in probability of coverage among

non-democratic newspapers was significantly higher than even the largest increase among democratic media.

Civilian victimization by government forces produced the opposite patterns. Democratic states saw significantly more news coverage following an increase from 0 to 130 civilians killed or wounded by the government (1st to 99th percentile), with a 15% uptick in probability of a Libya story (CI: +1.6, +28.3). In the same scenario, non-democratic states were neither more nor less likely to see a story on Libya (+4.5%; CI: –7.2, +16.9).[30]

We found similar results on the newspaper-day level of analysis, where an increase from 0 to 130 government-caused civilian casualties preceded an 8% increase (CI: +5.2, +10.6) in coverage probability among newspapers in democracies, but a statistically insignificant decrease among newspapers in non-democracies (–4.5%; CI: –11.4, +2.6).[31] Although the disparity between democratic and non-democratic responses was not as profound for government abuses as it was for other categories, it remains significant at the newspaper-day level. Democratic and non-democratic media, the data suggest, responded to the same events in very different ways.

As we report in the online appendix, these results are robust to alternative measures of democracy and press freedom. They are also consistent when we look only at major, high-circulation newspapers (i.e. greater than

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[27] Simulations based on Model 11.
[28] Simulations based on Model 7.
[29] Simulations based on Model 11.

[30] Simulations based on Model 7.
[31] Simulations based on Model 11.

100,000 copies per day, or top quintile of circulation by country), and when we disaggregate the articles into general news stories and opinion-editorials.

A potential objection to the above is that almost every country that militarily intervened in the Libyan Civil War was a member of NATO, and hence a democracy.[32] The tendency of media in democratic states to overlook rebel crimes, while emphasizing popular protests and government atrocities, may reflect alliance commitments and rally-round-the-flag effects more than regime type. This is a non-trivial concern, and one that is difficult to directly evaluate. Because democratic governance is a key criterion for membership in NATO, there is insufficient variation to ascertain whether democratic and non-democratic alliance members saw different types of coverage. Yet not all democracies are NATO members, and we can still ask whether NATO members – or the subset of NATO that directly participated in the coalition – reported differently on the crisis than other democratic states. To this end, we replicated the models in Equations (3) and (4), replacing 'Democracy' in the interaction terms with 'NATO member' – and, more narrowly, 'coalition member' – while restricting the sample to democratic states and the date range to the post-intervention period (i.e. after 19 March 2011).[33] We report the full results in the online appendix, but offer a brief summary here.

We find little evidence of an 'alliance effect'. Following almost every type of violent event, the models show either no difference in coverage propensity between NATO and non-NATO democracies, or differences in the opposite direction of what we might expect. For instance, newspapers in non-NATO democracies were actually *more* likely to publish Libya stories after government killings of civilians and *less* likely after rebel killings – although these differences were, at best, marginally significant. We found similar patterns when comparing democracies directly participating and not participating in the intervention. Although we cannot exclude the possibility that alliances have other potentially important effects on news coverage, military commitments do not drive the specific democratic reporting biases we identified in the Libyan case.

[32] The exceptions were Qatar and the United Arab Emirates.
[33] Democratic coalition members in sample include Belgium, Bulgaria, Canada, Denmark, France, Great Britain, Italy, the Netherlands, Romania, Spain, Turkey, and the United States. NATO members include Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Great Britain, Hungary, Italy, Latvia, Lithuania, the Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, Turkey, and the United States.

Conclusion

Reporting biases in news coverage of conflict can be attributed in large part to political regime type – in democracies, media firms' preferences for profit maximization have more influence on reporting than state preferences for political survival; in non-democracies, the opposite relation holds. Our data offer strong evidence for this proposition. At least in the case of Libya, media in non-democracies evidenced a clear pro-incumbency bias in their news coverage, while their counterparts in democracies demonstrated an opposing, pro-challenger bias. These patterns held across all of our tests, including coverage of government-inflicted civilian casualties and anti-regime protests (more coverage by democracies; less by non-democracies), and coverage of rebel-inflicted civilian casualties (more coverage by non-democracies; less by democracies). Though prior work had found tentative evidence of such biases, none has been able to undertake systematic testing of these propositions with similarly comprehensive data.

These findings are potentially important in helping improve our understanding of the 'framing war' fought through the press that frequently accompanies the 'shooting war' on the ground. While media in democracies are in most cases independent from government influence, they have their own institutional biases – such as newsworthiness criteria that emphasize novelty, conflict, proximity, and drama – that tend to result in conflict coverage favoring antiregime forces. Meanwhile, the self-preservation motive of authoritarian governments that seek to influence or control their countries' media favors coverage that underscores the legitimacy and inevitability of the status quo. In cases of civil wars with the potential to engender foreign intervention, the former can be quite consequential. To the extent democratic pro-challenger biases result in systematically greater international support for intervening in civil conflicts, such coverage could raise the pressure on leaders to do so, potentially altering the outcomes of such conflicts. Conversely, non-democracies' pro-incumbent bias is clearly aimed at limiting the propensity of external powers to act against their authoritarian counterparts. Their ultimate goal presumably is to reduce the likelihood that they might later suffer a similar fate.

It is difficult to generalize from one civil war, as all wars are unique. However, the Libya case is a difficult test of our theory. Because it occurred at the height of the Arab Spring, intense international attention to the region essentially guaranteed that media coverage would be scrutinized and systematic biases in coverage exposed.

That we found strong evidence of reporting bias despite the watchful eye of the international community suggests that such biases are likely not limited to this case and, if anything, are stronger in less highly scrutinized contexts.

This study represents a first step in better understanding the nature and influence of reporting bias in international conflict. Still to be explored are the effects on reporting bias across different types of media ownership and variations in conflicts themselves. Do networks of media outlets converge in their coverage of civil conflict? Do different types of violence – for example, selective vs. indiscriminate – engender qualitatively different responses from media? And do these differences matter in terms of influencing global public attitudes toward intervention? These are just a few of the topics we hope to investigate in future research. Ultimately, our goal is to better define the role of media – as the primary source of information about international events for the vast majority of citizens and leaders alike – in international conflict processes.

Replication data

The dataset, codebook, and do-files for the empirical analysis in this article can be found at http://www.prio.no/jpr/datasets.

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Supplemental material

The online appendices are available at http://jpr.sagepub.com/supplemental.

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MATTHEW A BAUM, b. 1965, PhD in Political Science (University of California, San Diego, 2000); Marvin Kalb Professor of Global Communications and Professor of Public Policy, Harvard University (2008–); research interests: conflict processes, political communication, domestic sources of foreign policy.

YURI M ZHUKOV, b. 1980, PhD in Government (Harvard University, 2014); Assistant Professor of Political Science and Faculty Affiliate, Center for Political Studies, Institute for Social Research, University of Michigan (2014–); research interests: international security, civil conflict.