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Convention, Protest, or Violence? Estimating the Influence of Repertoires of Contention over Tactical Choice

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Abstract. Why do people opt for different forms of collective action, like lobbying, marching, or rioting, to voice contentious claims? The patterns of these collective action forms, or “tactics” exhibit variations among groups, regions, and nations, evolving over time. Current explanations for such tactical patterns are unsatisfactory due to limited theoretical and empirical exploration of the concept of repertoires of contention. This paper presents a comprehensive theoretical model drawing on social practice and learning theories, centered around the notion of tactical familiarity. The central idea posits that people in diverse societies have learned distinct ways of doing politics, gaining varying familiarity and proficiency with different tactics, developed through three mechanisms: feedback, diffusion, and memory. These mechanisms contribute to the formation of notably distinct repertoires of contention. Based on this theoretical model, this study develops an empirical measure of tactical familiarity. The novel measure allows comparing the impact of tactical familiarity with other factors, like political regime characteristics. Previous research has not conducted such comparisons, as it often focuses on particular tactics, like protests or violence, without delving into the full array of potential tactical choices, including conventional-institutional ones. Using quantitative event analysis and a dataset of 10 Million International Dyadic Events, the paper examines 17,575 global political events from 2000 to 2004. Multilevel multinomial logistic regression highlights repertoires of contention’s significant influence on tactical choices, potentially outweighing political regime characteristics.

Keywords: repertoires of contention, protest, violence, contentious politics, event analysis.

1. INTRODUCTION

To address grievances, seek material benefits, or demand rights, contentious social actors often follow institutionalized routines of conventional claim-making such as voting, lobbying, or taking judicial actions. On some occasions, however, they decide to go into the streets to protest collectively and disrupt ordinary flows of traffic or everyday operations of businesses or governments. In still other instances, they turn to more violent means, sometimes incurring damages to private or public property or to human lives. A quick inspection of cross-national and cross-sector patterns (cfr. *infra* Figure

1) reveals a great deal of variation. The pie charts show the proportions of convention (institutionalized and undistruptive political actions without public mobilizations), protest (non-violent street mobilizations that are often disruptive to the economy, society, and politics), and violence (entailing the use of force) used by social actors between 2000 and 2004. In certain societies, conventional forms of action are predominantly employed (e.g., Switzerland, USA, Japan), whereas in others, there is a higher inclination towards protest forms (e.g., Italy, Venezuela, Bangladesh). Meanwhile, in some societies (e.g., Afghanistan, Iraq, Uganda), actors exhibit a pronounced inclination towards violent forms at very high rates. The three pie charts on the right show that, even within the same country (Italy), the forms of action chosen by actors vary widely.

Why are the forms of collective action, or “tactics”¹, chosen so drastically different? Existing studies have identified a range of factors influencing tactical choice: political opportunity structures (Kitschelt 1986), patterns of social cleavages (Olzak 2006), levels of economic development (rich and poor societies) (Muller and Seligson 1987), the strength of the state (Johnston 2012), or the practices of media reporting (Barranco and Wisler 1999). We argue that these answers remain unsatisfactory because the concept of repertoires of contention has been under-theorized and under-explored empirically. Theoretically, the concept of tactical familiarity – an essential component of the repertoire concept originally defined by Charles Tilly – has not been fully utilized in analyses. The idea suggests that contentious actors in different historical contexts have learned different ways of doing politics, acquired different degrees of familiarity with different tactics, and thus developed strikingly different repertoires of contention, as Figure 1 above showcases. We take such cultural dimensions of learning and familiarity seriously and empirically investigate whether tactical familiarity genuinely contributes to people’s decisions to employ familiar tactics and, if so, to what degree. To assess the significance of tactical familiarity, we will conduct a comparative analysis with the impact of political regime characteristics (democracy and state capacity), recognized as two major explanatory factors in the literature. In other words, our inquiry will seek to answer the question: which serves as a more influential predictor of tactical choice, repertoires of contention or institutional regime characteristics?

Our findings arguably indicate that the repertoires of contention, operationalized as tactical familiarity, are stronger predictors than regime characteristics. While it

might sound self-evident that repertoires of contention explain contentious tactical choices, the argument is far from trivial. Only a small number of empirical studies have fully adopted the definition of repertoires of contention as tactical familiarity and designed research plans accordingly to examine the links between repertoires and tactical choices (Ring-Ramirez, Reynolds-Stenson and Earl 2014). The unpopularity of such an approach to repertoires is especially evident in quantitative empirical studies, including those using protest event analysis in which strategic and rational accounts of tactical selection have gained salience (Maher and Peterson 2008).

This study attempts to contribute to the literature on two fronts, theoretical and empirical. First, building upon theories of repertoires of contention, social learning theories, and social practice theory, this study proposes a theoretical model of repertoires of contention built around the idea of tactical familiarity. Simply put, for those who own a toolkit (i.e., a repertoire), not all tools (i.e., tactics) are the same. If you are good at using specific tools, you frequently choose these; if you struggle with the others, you may be reluctant to use those. This is a matter of course, but nonetheless few studies have incorporated the idea into their actual research design (Wada 2016). We consider that, for each of the tools (tactics) in a toolkit, contentious social actors possess different degrees of familiarity, mastery, or – borrowing a concept from the social practice theory – “competence” (Shove, Pantzar and Watson 2012). We will use “tactical familiarity” as a central theoretical and empirical tool across this paper.

We then make a clear conceptual distinction between actual tactics chosen by social actors at a moment of contention and repertoires of tactics as accumulated knowledge, a distinction that has not always been made clearly in the literature, as assured in the literature section. The distinction enables us to demonstrate the effects of repertoires of contention on actors’ tactical selection empirically, something rarely done in quantitative studies of protests and violence. This distinction between tactics and repertoires permits us to introduce three major mechanisms of repertoire familiarity – feedback, diffusion, and memory – to complete our theoretical model.

The second and empirical contribution of this study is to employ a quantitative approach and compare repertoires’ impact on tactical choice with that of other potential factors, including political regime characteristics. To accomplish this, we first create an empirical measure of repertoires of contention building upon the idea of tactical familiarity. Most studies adopting a cultural definition of repertoires of contention have

¹ In this article, we use “forms of action” and “tactics” interchangeably.

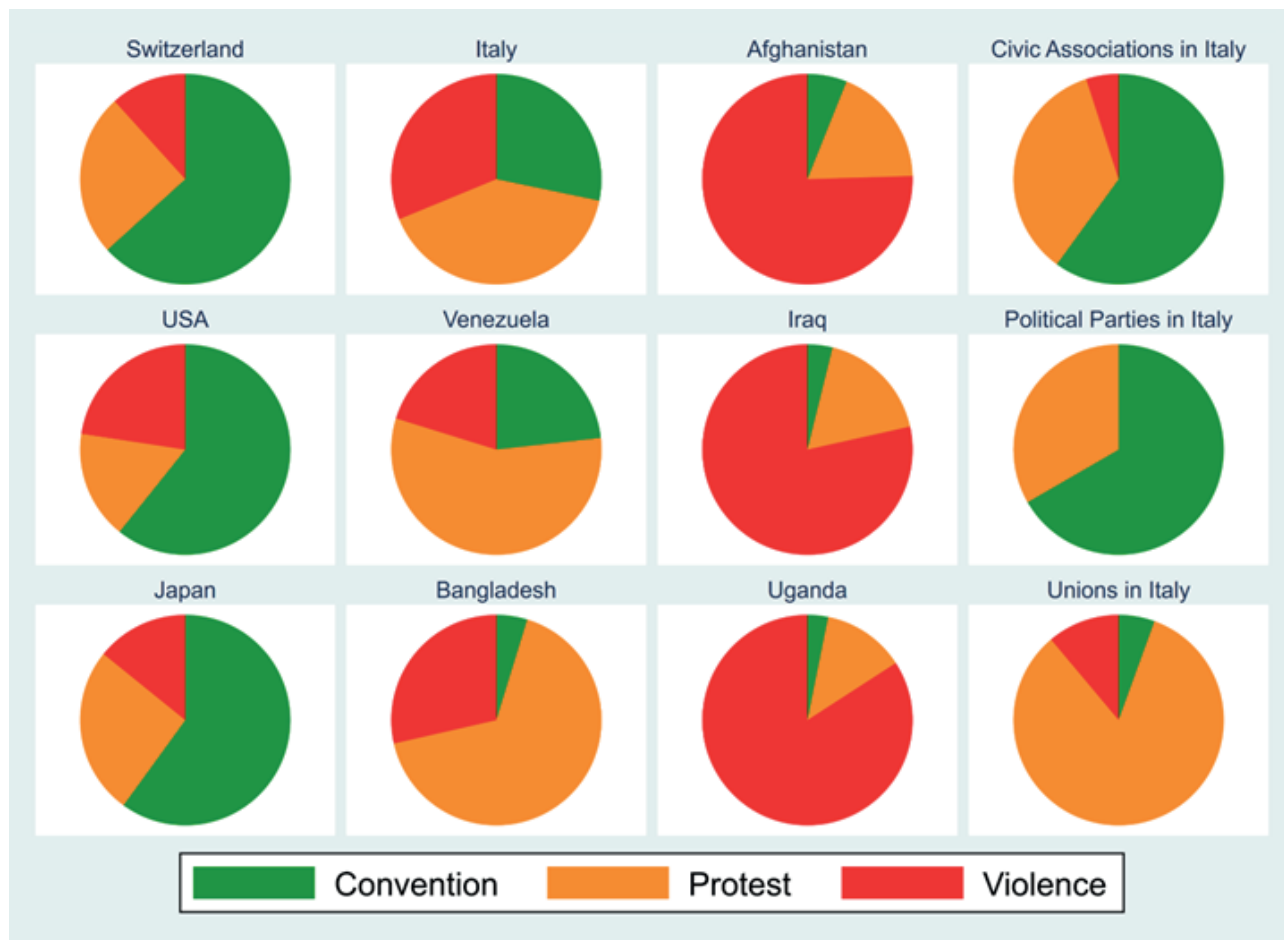


Figure 1. Convention, protest, and violence by country and by actor type, 2000-2004. *Source:* 10 Million International Dyadic Events (King and Lowe 2008).

employed qualitative methods empirically, such as in-depth interviews (Baumgarten 2017; Coe and Sandberg 2019), historical methods (Edelman and León 2013), and participant observation (Gade 2019). Admittedly, these qualitative approaches offer subtle and enriched descriptions of cultural process of learning and meaning construction in tactical selection, but we also claim that the difficulty of measuring repertoires should not justify the exclusion of the theoretically relevant factor from quantitative analyses of convention, protest, and violence. This study presents a method of scaling the “familiarity” aspect of repertoires of contention².

For this, we use an event analysis method, which in contrast to previous work that has usually focused on

either protest or violence and rarely included convention, includes all three categories in its data collection design. Rather than treat non-disruptive conventional and institutional politics on the one hand and disruptive protests and violence on the other as distinct activities with separate literatures examining each, recent studies have been increasingly aware of the need to integrate these tactics into a unified analytic framework (Quaranta 2018; Katsanidou and Eder 2018). Our political event database – “10 Million International Dyadic Events” – provides information about the broadest range of tactics from convention to violence, which permits us to compare the probabilities of choosing protest and violence with those of choosing convention. We estimate repertoires’ impact on tactical choice relative to that of other potential factors, including political regime characteristics and in so doing discover two intriguing relations between repertoires and tactical choices.

² As we discuss in detail in the method section, our method of scaling ‘familiarity’ is still exploratory, given data restrictions. A more sophisticated repertoire measure should be developed when high-quality event data becomes available.

The remainder of this paper is organized as follows. We will review the literature on contentious tactics and repertoires in the next section, introduce our research methodology including data, variables, and statistical estimation in the section following, and present our results in the findings section. The implications of our findings and prospects for future improvements will be discussed in the final section.

2. LITERATURE

This section reviews the existing literature and introduces our ideas about how to conceptualize and model repertoires of contention and tactical familiarity. We then discuss institutional regime characteristics, an alternative and predominant independent variable against which the impact of repertoires of contention is measured.

2.1. *Tactical familiarity as culturally defined repertoires of contention*

Repertoires of contention is the principal factor of interest in our study. Despite growing attention to repertoires of contention in the literature (Alimi 2014; Della Porta 2013; Taylor and van Dyke 2004; Bosi and Zamponi 2020), there is much room for theoretical and empirical improvements. Figure 2 visualizes our ideas.

First, we highlight tactical familiarity as one of the three cultural dimensions of repertoires of contention along with tactical value and tactical norm (see box A, Figure 2), something which – as lamented by Tilly – has not been done fully so far (especially in quantitative research designs) (Tilly 2008: xiv). Tilly defines a repertoire of contention as a «limited set of routines that are learned, shared, and acted out through a relatively deliberate process of choice» and emphasizes that repertoires are «learned cultural creations» which «emerge from struggle» (Tilly 1995b: 42). Della Porta and Diani (2006: 182) also use a similar definition saying that repertoires of contention «are handed down, reproduced over time, because they are what people know how to do». If we adopt such a definition and conceive repertoires of contention as a «cultural toolkit» (Swidler 1986) to be learned by doing, the definition will open the possibility of thinking about the facilitating and constraining effects of repertoires. That is, repertoires facilitate contentious social actors to employ certain tactics that they are familiar with but constrain them from using unfamiliar ones³.

We argue that this theoretical idea – i.e., the degree of familiarity, mastery, and competence (Shove, Pantzar and Watson 2012) actors have with specific tools has facilitating and constraining effects – is critical in the discussion of repertoires of contention because it implies that the familiarity affects rational tactical decisions, either consciously or not. People cannot use a tactic if they do not know how to do or are not aware of it, no matter how desirable it would have been in purely strategic terms (Polletta 2012: 55). And, as is the case with any learning experience, people cannot be familiar with everything. As Tilly (1995a: 42) writes, “[A]t any particular point in history, [...] they learn only a rather small number of alternative ways to act collectively.” Our study explicitly incorporates this facilitating and constraining aspects of repertoires of contention into the analysis.

It should be noted that tactical familiarity does not exhaust the cultural dimensions of repertoires of contention. The existing literature has since made a substantial theoretical progress by incorporating two other dimensions – which we call “tactical value” and “tactical norm.” The tactical value dimension distinguishes highly valued tactics (ones which actors use repeatedly) from less valued ones (Jasper 1997; Galli 2016: 272-273). The tactical norm dimension separates tactics that are considered morally and socially acceptable (so actors use them often) from ones that are considered morally objectionable (Crossley 2002; Moore and Shepard 2013). As Jasper (1997: 237-238) expresses succinctly, tactics «represent important routines, emotionally and morally salient in these people’s lives» and just «as their ideologies do, their activities express protestors’ political identities and moral visions.» Chenoweth and Stepan (2011: 37) state that any tactic needs to rely on the “moral barriers” of the citizens that implicitly support it.

Next, our study attempts to contribute to the literature by making a clear conceptual distinction between tactical choices in a moment of contention (see box B, Figure 2) and repertoires of contention from which tactics are chosen (see box A, Figure 2). With some important exceptions (Bandura 1977; Coe and Sandberg 2019), most research has overlooked this separation mainly due, we suspect, to a very subtle and nuanced demarcation between repertoires and tactics selected. This analytic distinction between “learning” and “performing” (Bandura 1973: 65) is not easy to maintain in actual analyses because once a tactic is chosen and used, the experience of using the tactic becomes a learning process for the participants in contention and, as a result, the tactic becomes part of their repertoire for the next round of contention (see Mechanism #1 “Feedback Mechanism”, Figure 2). This conceptual separation of

³ King and Cornwall (2005) called these effects of repertoire familiarity as “structural inertia”.

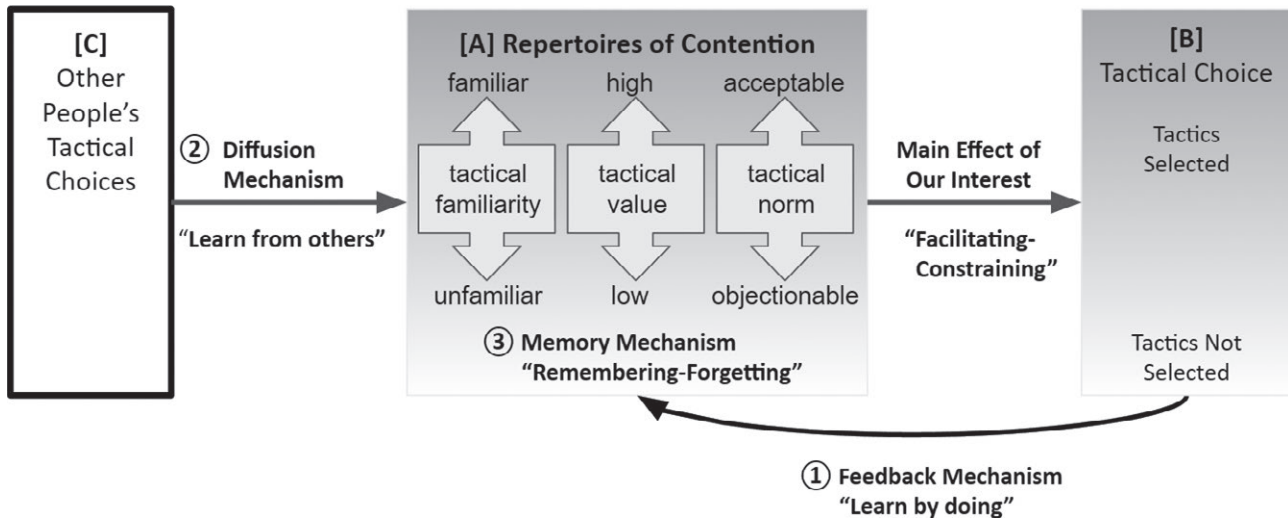


Figure 2. Causal mechanisms of repertoires and tactical choice. Source: Author's elaboration.

repertoires of contention from tactical choice is critical because it allows us to explore causal and empirical relations between the two (see Main Effect of Our Interest "Facilitating-Constraining", Figure 2).

Where do repertoires come from then? How do contentious social actors acquire a specific repertoire of contention? We identify three mechanisms drawing from the existing literature. The first mechanism is the "feedback" loop of "learn by doing" – «learn through practice» (Bandura 1973: 90) and «learn through adaptation» (King and Cornwall 2005: 7) according to the social learning theory – which we have already pointed out in the previous paragraph (see Mechanism #1, Figure 2). Actors in contention become familiarized with a tactic by doing it themselves.

The second mechanism is "diffusion" (see Mechanism #2, Figure 2). This is a mechanism of «learning from others or learning through modeling (observational learning)» (Bandura 1977: 22). Contentious social actors do not need to learn all available tactics by experimenting with or experiencing them themselves. They can also learn by observing others. Social movement diffusion research has addressed this mechanism. It untangled two types of diffusion mechanism – relational and nonrelational – through which tactics transfer from one group to another (Givan, Roberts and Soule 2010: 7; Wang and Soule 2012). In the relational diffusion mechanism, actors learn about a new tactic through direct interpersonal networks such as acquaintance with individual activists or intermediary organizations (brokerage) (Chabot 2010; Soule 1997; Jansen, Sluiter and Akkerman 2016). In the nonrelational diffusion, actors can become familiar with a new way of acting without direct person-to-

person contact (McAdam and Rucht 1993; Soule 1997) through mass media (Andrews and Biggs 2006), electronic communication (Oliver and Myers 2003; Rolfe 2005), printed documents, or historical narratives (Zamponi 2018). Moreover, previous research indicates specific diffusion pathways, such as «attribution of similarity» (Tilly and Tarrow 2015), «cultural linkage» (Strang and Meyer 1993), or «structural equivalence» (Burt 1987; Soule 1997). Simply put, social actors are likely to learn more from others who are similar – culturally or structurally – to themselves. For instance, in analyzing how a protest tactic called "shantytown" diffused between 1985 and 1990 within U.S. campuses, Soule (Soule 1997: 870) points out that «student activists at liberal arts colleges look to student activists at other liberal arts colleges for cues on protest tactics».

The third mechanism involved in shaping repertoires of contention is related to "memory". It is a mechanism of «remembering and forgetting» (see Mechanism #3, Figure 2) or «retention» according to the social learning theories (Bandura 1977: 25; King and Cornwall 2005: 7). Even when people have learned a tactic by doing it or from observing what others do, the know-how they have acquired will not last forever. People can remember and retain certain tactics well as they simultaneously forget others. As such, the memory mechanism affects the degree of tactical familiarity and hence the probability of the tactic chosen. An attempt to incorporate this mechanism into large-N quantitative research can be considering "time". Time is well-used proxy indicator for this mechanism in that actors remember recently learned tactics better than ones they did a long time ago. Frequent tactical repetition

will refresh users' memory, improve their mastery, and increase their degree of tactical familiarity. In contrast, if a tactic has not been used repeatedly after its first adoption, it is likely that people will lose the know-how and competence necessary for employing this tactic and become increasingly unfamiliar with it (Lee *et al.* 2010).

Time, however, is obviously not the only function of the memory mechanism. Tactics used in symbolic historical events, as exemplified by revolution or state repression, are more likely than other tactics to remain in actors' memories for a longer period (Bandura 1977). Ceremonies and commemorations of these events will refresh their collective memory (Armstrong and Crage 2006; Cheng and Yuen 2019; Zamponi 2018), thus serving to maintain the level of tactical familiarity. In short, the memories associated with special events become a catalyst to heighten and preserve levels of tactical familiarity (Baumgarten 2017; Della Porta 2018; Edelman and León 2013).

In sum, taking repertoires of contention in the light of tactical familiarity and looking into the conceptual separation of repertoires from tactics enables us to establish the possible causal paths leading from repertoires to tactical choices and to investigate these paths empirically. Grounded on the existing literature, we also laid out three mechanisms (of feedback, diffusion, and memory) indicating how repertoires are generated and reproduced. As we will elaborate in the method section, this study aims to construct an empirical measure of the tactical familiarity concept, considering the three mechanisms, and assess its statistical association with the employed tactics. However, due to data limitations, the study does not test the "full model" encompassing the other dimensions of repertoires of contention (i.e., tactical value and tactical norm). Elucidating tactical familiarity, we believe, still helps contribute to a better understanding of the cultural dimensions of repertoires of contention.

2.2. Institutional Regime Characteristics

Rather than solely testing a hypothesis regarding the impact of repertoires of contention on employed tactics, this study contrasts that effect with the influence of institutional regime characteristics. This approach is taken because effects that may be statistically significant may lack practical significance in real-world scenarios. To assess whether a statistically significant effect truly indicates a practically meaningful effect, it is essential to compare it against established benchmarks. The rationale for utilizing institutional regime characteristics as a benchmark stems from the extensive investigation

by social movement scholars into the proven relationship between the institutional characteristics of political regimes and contentious tactics (Tarrow 2011; Meyer and Minkoff 2004).

Two dimensions of political regime – democracy and state capacity – have received attention on the selection of action forms (Tilly 2006: 21). The degree of democracy of a country has been one of the essential factors explaining the rise and fall of claim-making activities (Gamson and Meyer 1996; Skrede Gleditsch and Ruggeri 2010). In non-democratic autocratic regimes under which political opportunity structure (POS) is largely closed, challengers generally refrain from engaging in protest or violence due to stringent government regulations and the high risk of violent state repression (Kriesi 1995; Olzak 2006). In democratic regimes, in contrast, where POS is more open, challengers are more likely to use protest tactics owing to possible elite divisions competing for power and to the subdued risk of state repression (Tarrow 2011).

The inverted U-curve theory – a variant of POS theories – also depicts the relationship between degree of democracy and tactics used but in a different way (Della Porta 2018: 465; Eisinger 1973). The theory predicts that protest and violent mobilizations are comparatively rare under autocratic regimes because of a high risk of state repression and a low benefit of protest and violent tactics (Sánchez-Cuenca and La Calle 2009: 40). Protests and violence are also infrequent under democratic regimes because challengers will have open and multiple access points to state institutions through conventional tactics with minimum risk of state repression. Its distinctiveness is the observation regarding semi-autocratic or semi-democratic regimes, characterized as partly open yet somewhat repressive. In these regimes, there is a combination of weak state repressiveness to deter civil violence and insufficient political openness to convince citizens to use non-violent means exclusively. Repressive measures, if applied, will likely lead to social grievances inducing challengers to fight back, while political openness will let them organize and resort to protest and violent tactics against the regime. In this way, challengers will have more leeway to employ a broader range of actions under semi-authoritarianism and semi-democracy (Muller and Weede 1990; Sánchez-Cuenca and La Calle 2009: 40).

State capacity, another dimension of political regime, is theorized to affect challengers' selection of tactics (Tilly 2006; Skrede Gleditsch and Ruggeri 2010). Strong states, insofar as their military-repressive capacity, bureaucratic-administrative capacity, autonomy within the international state system, or coherence of politi-

cal institutional capacities (Hendrix 2010), are more able than weak ones to prescribe challengers' political actions and tactics (Kriesi 1995; Tilly 2008). Facing strong and capable states, social actors' tactical options are greatly limited to undisruptive conventions.

Weak states, in contrast, often fail to monopolize the use of armed forces within their territory. Such weakness and incapability could lead to a burst of contentious uprisings, ranging from protests, riots, guerrilla activities, and revolutions to civil wars (Skocpol 1979). Waves of violence could also occur under conditions of governmental impotence or unresponsiveness, as happens, for example, in failed states (Cingolani 2018)⁴.

3. METHOD

3.1. Event Data

Information pertinent to our main variables, tactical choice and repertoires of contention, comes from the database identified as "10 Million International Dyadic Events" (hereafter, the 10 MIDE database), available from Harvard Dataverse (King and Lowe 2008). Using computer-automated coding technologies, nearly 10 million events from 1990 to 2004 are compiled in the 10 MIDE database using Reuters news reports as a data source. Each event is saved in a dyadic form of «Subject Actor does something (event type) to Target Actor», with Subject and Target Actors coded from about 450 actor categories including countries and within-country groups and does something (event type) to coded in an ontology of 249 event types (King and Lowe 2008: 620) based on the Integrated Data for Events Analysis (IDEA) event codes (Bond *et al.* 2003). The 10 MIDE database is chosen because it does record the information about actual tactics used in the events (recorded as "event type") and it enables us to compare the use of conventional tactics with that of protest and violent tactics, unlike many event databases that focus on protests and/or violence exclusively. From the 10 MIDE database, we extracted 17,575 political events in which conventional, protest, or violent tactics were employed⁵.

⁴ While institutional regime characteristics (democracy and state capacity) are primarily structural, certain dynamic political processes and events – such as radicalization, polarization, autocratization, coup d'états, or protest cycles – could also influence people's tactical choices. Due to data constraints, this study was unable to incorporate these potentially relevant factors into the analysis. The authors are grateful to the anonymous reviewer for highlighting this possibility, which could enhance the richness of our analysis.

⁵ For the introduction of the 10 MIDE and the concrete procedure of filtering political events from the database, see Online Appendix A.

3.2. Main Variables of the Study

Our dependent variable, tactical choice, has three broadly defined categories: convention, protest, and violence. Our classification decision of the actual tactics ("event type" in the 10 MIDE database) largely rely on the Goldstein scale (Goldstein 1992), which assigns a numeric score to a political action according to its intensity, ranging from being cooperative (highest score of +10) to conflictive (lowest score of -10). According to our classification, between 2000 and 2004 the world saw 5,557 events with conventional tactics (31.6%), 4,431 events with protest tactics (25.2%), and 7,587 events with violent tactics (43.2%)⁶.

Our primary independent variable, tactical familiarity as repertoires of contention, is about social actors' collective learning of and ongoing familiarity with claim-making tactics from past struggles. Available information about such subjective processes is limited, especially for quantitative research setups like ours, but some inventive efforts can be undertaken. To construct an approximate quantitative measure, we made four decisions. First, given the three tactical options (convention, protest, and violence), we decided to measure actors' familiarity with conventional, protest, and violent tactics separately.

Second, to reflect the idea of learning from past struggles (Mechanisms #1 and #2), we presupposed that actors learned by doing or from others over a period of 10 years prior to a given event. In other words, to predict tactical choices in the year 2000, for example, values of the tactical familiarity variables were calculated using information about tactical choices over the preceding 10 years, i.e., 1990-1999. We confess that the use of the 10-year time span is arbitrary. It is plausible that contentious actors may have learned from remote past, well before 1990. It is our compromise to use the 10-year

⁶ A table showing how we classified 37 event codes into the three categories is available in Online Appendix B. Two issues need to be highlighted concerning the dependent variable. First, the 10 MIDE database lacks information regarding the reasons, rationale, or logic behind actors' tactical decisions, hindering a more comprehensive understanding of the PROCESSES involved in tactical choice. Nevertheless, the database remains highly valuable because its "event type" allows us to identify the OUTCOMES of such processes of choosing tactics. Second, in a real-world political event, a series of interactions typically occur among relevant actors and institutions. However, the 10 MIDE database records only one tactic per event, chosen as "representative" or "news-worthy" by Reuters, indicating potential media selection bias (Hocke 1998). While this study endeavors to mitigate the impact of such bias by incorporating "media attention" as a control variable in the regression models, as detailed in Online Appendix C, it is important to note that many tactics employed in sequential contentious interactions may go unrecorded. We appreciate the anonymous reviewer for pointing out these issues.

span: the longer the span was (which is desirable), the more cases (and the degrees of freedom) we would lose in our regression models (which is not desirable). All the cases before the year 2000 were excluded from the final analysis because a full ten years of data were not available to compute the tactical familiarity scores for these cases. Thus, the time span under this study is 2000-2004.

Third, we attempted to integrate the idea of structural equivalence – a diffusion mechanism (Mechanism #2 in Figure 2) (Soule 1997) – by computing the familiarity of convention, protest, and violence by country and subject actor category combination⁷ (e.g., USA-Unions, Mexico-Students). We assumed that the subject actor categories in the data would best reflect the theoretical idea of structural equivalence that the actors are more likely to learn from others like themselves.

Fourth, to incorporate the idea of the memory mechanism of remembering and forgetting (Mechanism #3 in Figure 2), we assumed that actors would remember recent experiences better than past ones. We introduced a simple memory function of gradually forgetting past happenings by using weights. To calculate the violence familiarity score to predict tactics in 2004, for instance, the frequency of violent events by the same country-actor category in the previous year was given a full weight of 1 as the most recent memory. Similarly, the frequency in the year 2002 was multiplied by a weight of .9, the one in the year 2001 by a weight of .8, and the frequency in the year 1994 (the first year of the 10-year time span) by a weight of .1⁸.

Here we should admit that the feedback mechanism (Mechanism #1 in Figure 2) was difficult to operationalize meticulously using our event data because we had no way of knowing if two events by same country-actor category (e.g., USA-Migrants) were in fact carried out by the same or similar set of concrete individuals, which would have enabled us to claim that these individuals learned the tactic by themselves during the first of the two events and used it in the second. Nevertheless, the explanatory power of our analysis still stands, recalling that the social learning theory points out that the diffusion mechanism is more common and important than

the feedback mechanism (Bandura 1977). The theory suggests that most human behavior is learned observationally and the capacity to learn by observation enables people to acquire large, integrated patterns of behavior (diffusion) without having to form them gradually by tedious trial and error (feedback) (*Ibidem*: 22).

In short, three repertoire variables – convention familiarity, protest familiarity, and violence familiarity – were created by computing weighted sums of the frequencies of convention, protest, and violence, respectively, by country-actor category in the past 10 years and by converting the weighted sums into percentages so that the three familiarity scores add up to 100%. Descriptive statistics of all variables including repertoires are shown in Table 1.

As a measure of democracy, we have used the electoral democracy index (*v2x_polyarchy*) from Varieties of Democracy (V-DEM) Dataset Version 10⁹. The index is designed to answer the question, «To what extent is the ideal of electoral democracy in its fullest sense achieved?», elaborated as «In the V-Dem conceptual scheme, electoral democracy is understood as an essential element of any other conception of representative democracy – liberal, participatory, deliberative, egalitarian, or some other» (Coppedge *et al.* 2020: 42). The squared term of this variable is also included to test the inverted-U curve theory which hypothesizes a curvilinear relationship between the degree of democracy and tactical choice.

To construct a measure of state capacity, two variables – domestic autonomy and international autonomy – from the V-DEM Dataset are used. “Domestic autonomy” (*v2svdomaut*) is a response to the question, “Is the state autonomous from the control of other states with respect to the conduct of domestic policy?” while “international autonomy” (*v2svinlaut*) is to «Is the state autonomous from the control of other states with respect to the conduct of its foreign policy?» (Coppedge *et al.* 2020: 175–176). Both are measures of the ability of a state to formulate and carry out its policies independent of the influence of other states. We conducted a principal component analysis of the two variables to produce a composite scale.

Lastly, we controlled for the effects of the other theoretically relevant variables. For reasons of space, we moved the description of these control variables to Online Appendix C.

⁷ We used two actor codes (country, sector) in the database to classify the subject actor of each event. Civil society actors are classified together under the sector code “CIVS” (civil society agents). This broad category contains 22 subcategories as follows: Armed civilian groups, Artists, Athletes, Businesses, Candidates, Civic group agents, Criminals, Detainees, Educators, Ethnic agents, Farmers, Mass media, Health care agents, Migrants, Nominal agents, Occupations, Political opposition, Political parties, Philanthropic agents, Religious agents, Students, and Unions.

⁸ In a similar attempt to operationalize the time-dependent aspect of contentious repertoires, King and Cornwall (2005: 13) used the contentious strategies in the past year and created lagged variables.

⁹ “The V-Dem Dataset”, V-Dem Institute, accessed July 5 2020, doi:10.23696/vdemds20 (currently accessible at: <https://www.v-dem.net/en/data/archive/previous-data/v-dem-dataset/>).

Table 1. Descriptive statistics of the quantitative variables.

<i>Variables</i>	<i>N</i>	<i>mean</i>	<i>sd</i>	<i>min</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>max</i>	<i>NA</i>
Repertoires of contention									
protest familiarity (cay)	8242	.40	.33	.00	.06	.39	.64	1.00	0
violence familiarity (cay)	8242	.19	.27	.00	.00	.07	.27	1.00	0
Institutional regime characteristics									
democracy (cy)	816	.52	.28	.02	.27	.54	.79	.92	58
state capacity (cy)	816	.16	.81	-3.87	-.10	.45	.70	1.22	58
Social cleavages									
religious (cy)	826	.38	.22	.00	.18	.37	.58	.75	48
ethnic (cy)	834	.44	.25	.00	.22	.45	.65	.94	40
class (cy)	816	.60	.28	.04	.36	.63	.90	.98	58
Material resources: GDP per capita (cy)	874	59,517	706,568	81	473	1,754	7,082	9,875,255	0
Globalization: KOF Globalization Index (cy)	850	55.30	15.86	24.50	43.19	53.20	65.27	88.45	24
Associational strength: civil society index (cy)	874	49.22	10.21	23.22	41.08	51.41	58.60	66.45	0
Macroeconomic conditions: economic growth rate % (cy)	874	2.51	4.21	-31.65	.52	2.44	4.36	37.13	0
Media attention: sum of non-political events (cy)	874	2,639	11,435	0	62	247	1,613	181,463	0
Population (thousands) (cy)	874	35,284	128,448	1	2,961	8,163	23,687	1,300,274	0

NA: the number of missing cases
 cy: variables measured at the country-year unit
 cay: variables measured at the country-actor category-year unit

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Source: Authors' elaboration. We report familiarity variables measured in the original unit ("cay" or countryactor category-year unit: N=8,242) not in the event mut (N=17,575). The descriptive statistics are different between the two units because the distributions in the event mut reflect the familiarity levels of the frequent actor categories (appearing in the data many times) more than the less frequent ones.

3.3. Statistical estimation

We use multilevel multinomial logistic regression models because our dependent variable – tactical choice – has three categories (convention, protest, and violence) and because there are two hierarchical levels as political events are nested within countries. Multilevel modeling is the most viable for this study that includes the independent variables at two theoretical levels in one model: institutional regime characteristics at the level of country and repertoires at the level of political event¹⁰. It thus

enables us to compare their effects on tactical choice by gaining the amount of changes in predicted probabilities, as we explain in the findings section. We used two approaches to our missing data problem, listwise deletion (to remove cases that are missing data on any of the variables in our model) and multiple imputation.

4. FINDINGS

The results of our multilevel multinomial logistic regression analysis are shown in Table 2. Our decision to use multilevel modeling turns out to be appropriate because the random effect (i.e., the country level effect) is both practically and statistically significant. The

¹⁰ For each political event in the model (i.e., each first-level unit), we identify the actor of the event and obtain the familiarity scores of the actor's country-actor category.

Table 2. Multilevel multinomial logistic regression of tactical selection.

Variables	Model A (No Imputation)				Model B (Multiple Imputation)			
	protest		violence		protest		violence	
	<i>b</i>	<i>robust se</i>	<i>b</i>	<i>robust se</i>	<i>b</i>	<i>robust se</i>	<i>b</i>	<i>robust se</i>
Repertoire of contention								
protest familiarity	.276	.069***	-.154	.084	.267	.067***	-.167	.082*
violence familiarity	.495	.094***	1.255	.142***	.477	.093***	1.231	.141***
Regime characteristics								
democracy squared	-5.076	2.090*	-6.646	2.783*	-3.466	1.710*	-4.902	2.311*
democracy	4.313	2.000*	6.037	2.778*	2.553	1.664	4.234	2.338
state capacity	-.308	.087***	-.431	.140*	-.230	.082**	-.325	.129*
Target of contention								
domestic society	-.376	.085***	-.427	.083***	-.387	.084***	-.415	.083***
foreign government	.220	.157	-.441	.220***	.208	.157	-.403	.212
foreign society	-.982	.237***	-1.536	.345***	-1.029	.238***	-1.552	.335***
Social cleavages								
religious	-1.034	.351**	-1.573	.471***	-.966	.336**	-1.444	.450***
ethnic	.128	.335	.276	.432	.264	.311	.480	.417
resources	.681	.444	.982	.656	.457	.442	.619	.617
Other variables								
GDP per capita	.037	.120	.030	.169	.009	.107	.040	.145
globalization index	.001	.012	.006	.015	.001	.012	.004	.014
civil society index	.005	.011	.003	.013	.007	.010	.007	.012
economic growth rate	-.024	.014	-.022	.015	-.014	.014	-.018	.013
media attention	-.308	.068***	-.398	.098***	-.275	.068***	-.386	.095***
population	.116	.091	.146	.114	.074	.086	.129	.103
constant	2.220	1.344	2.793	1.455	2.816	1.252*	2.983	1.348*
variance	.296	.114	.789	.324	.281	.100	.698	.267
covariance	.284 (se=.170)				.252 (se=.141)			
number of clusters	156 countries				169 countries			
no. of observations	17,287 events				17,575 events			

*** $p < .001$, ** $p < .01$, * $p < .05$.

Source: Authors' elaboration. The protest familiarity and violence familiarity measures are included in the model, using the excluded convention familiarity measure as the baseline. The natural log of the original scales is taken to address the skewed distributions. A small value of .01 is added to the original familiarity scores ranging from 0 to 1 because the logarithm of zero is not defined. Therefore, the modified repertoire familiarity scores range from -4.61 (cases with zero familiarity) to .01 (cases with a familiarity of 100 percent).

estimated variance of the random effect on the tactical choice of protest relative to the tactical choice of convention (the base category) is .296 in the listwise deletion model (Model A). This gives a standard deviation of .544 which implies that a 1-standard deviation change in the random effect (country level effect) will amount to a 1.72 change (a 72% increase) in the relative risk ratio (the exponential of the standard deviation). Likewise, the relative risk ratio of the country level effect on the tactical choice of violence changes by 2.43 (a 143% increase). Thus, the country level effect appears to be greater on the tactical choice of violence than that of protest, but the difference estimated covariance of .284 is not statistically significant at .05 level ($p = .095$) which implies that a model constraining the same random effect for pro-

test and violence might suffice. The multiple imputation model (Model B) practically gives the same result on the analysis of variance and covariance of the random effect.

In the regression output, the robust standard errors – robust to the heteroskedasticity of the errors – are reported in order to adjust for 156 country clusters in Model A and for 169 country clusters in Model B¹¹. Giv-

¹¹ We conducted multicollinearity diagnostics, including VIF, tolerance, condition index, and variance proportions, using the collinearity diagnostics option in SPSS. The VIF exceeded 10 for four variables: democracy squared (11.5), democracy (14.3), GDP per capita (26.4), and religious cleavages (52.7). This prompted further investigation. Subsequently, we examined the condition index and its variance proportions table. While the condition index of three out of the fifteen dimensions exceeded 30, we did not identify a multicollinearity problem because none of these dimensions had more than one variable with variance propor-



Figure 3. Adjusted probabilities of tactical choice based on Model A (multilevel multinomial logistic regression with robust standard errors). *Source:* Authors’ elaboration. These graphs display the average predicted probabilities and the confidence intervals of tactical choices by selected independent variables based on Model A. Stata’s *margins* command is used. We report the adjusted prediction plots of Model A instead of Model B because Stata’s *margins* command is not valid after using multiple imputation methods (*mi* command). A boxplot on top of each AAP plot shows the distribution of the independent variable on the X-axis. The distributions displayed in these boxplots are based on the unit at which these variables are generated as reported in Table 1. In Figure 2, the boxplots of Democracy and State Capacity are measured using country-year as the unit. The repertoire familiarity scores are calculated by the country-actor category-year unit.

en the difficulty of understanding the substantive findings from the output table of multilevel multinomial logistic regression models as seen in Table 2, a series of Average Adjusted Prediction (AAP) plots, shown in Figure 3, help interpret the results more intuitively.

The effects of repertoires of contention on tactical choice are displayed in the two upper graphs in Figure 3. The X-axis corresponds to actors’ degree of protest and violence familiarity¹². Our main finding here sup-

ports the theory of repertoires of contention. For those actors who are unfamiliar with protest tactics, the probability of choosing the tactic of protest is very low (about .10 when the familiarity is near 0% in the graph on the upper left). As actors’ protest familiarity increases, however, the probability of protest selection increases. When the actors’ repertoire consists mostly of protests (e.g., a familiarity score exceeding 80%), the probability of choosing protest tactics reaches over .30. The more familiar actors are with protest tactics, the more likely they will select these tactics.

The same result applies to violence familiarity. As actors become more specialized in violent tactics, they are more prone to adopting these tactics. Notably, there are interesting findings vis a vis protest familiarity. First, as Figure 3 indicates, the facilitating effect is likely to be greater for violence familiarity than for protest fami-

tions above .90 (or even .70). The two variables with the highest condition index scores are as follows: civil society index (.50) and democracy (.21) for the first of the three dimensions; democracy squared (.80) and democracy (.66) for the second dimension, as expected given the related nature of these variables; population (.90) and media attention (.64) for the third dimension.

¹² The X-axis labels are switched from the logarithmic scale used in the regression models to the original percentages to facilitate interpretation.

arity. One way to investigate the practical effects of different variables in the model is to compare the probabilities between the 25th percentile and 75th percentile of the boxplot where most data – 50% of the entire distribution – concentrate, and we can compare the actual or realistic impacts of the variables on tactical choice. When protest familiarity increases from 9% (the 25th percentile of the data) to 64% (the 75th percentile), the probability of choosing the tactic of protest increases by .14 (from .19 to .33). When violence familiarity increases from 0% (the 25th percentile) to 27% (the 75th), the probability of selecting the tactic of violence increases by .36, or, remarkably, from about .05 to .41).

It is also intriguing to examine the tactic that is abandoned. When there is an increase in protest familiarity, the probability of actors choosing convention remains nearly constant while the prospect of their engaging in violence declines sharply. This indicates that protest tactics are substitutes for violent tactics. In contrast, when there is an increase in violence familiarity, conventional tactics decrease. Thus, violence increases at the expense of convention. These insights, obtained by inspecting the AAP plots, are new and original to our study. We will discuss more about these findings concerning the abandoned tactic in the Discussion section.

The next two AAP plots in Figure 3, Democracy and State Capacity, show the relations between regime characteristics and tactical choice. There are four critical findings to point out. First, the relation between contentious tactics and these structural and institutional factors are empirically demonstrated in the quantitative analysis of cross-national data. This is no minor accomplishment as concepts such as political opportunity structure have been one of the centerpieces in the literature of social movements and contentious politics.

Second, inverted-U curves are observed clearly in the Democracy graph. Along with the significant negative coefficients of the squared democracy variable in Table 3, this AAP plot graph proves that the peaks of the curves fall into the area between .3 and .6 of the democracy scores, indicating semi-democracies (or semi-authoritarian regimes) such as Russia (.37), Venezuela (.53), and the Philippines (.55). This finding supports the inverted-U curve theory which states that, as a political system opens and brings about favorable opportunities with a reduced risk of repression, protest and violent actions first rise and then fall again with the arrival of democracy.

Third, the State Capacity graph espouses our hypothesis regarding the relationship between state strength and tactical choice. As a state's capacity to formulate and implement policies increases, the probability

of actors selecting protest and violent tactics under such a state decreases. Strong states turn to be more capable of containing intense social mobilizations than weak states.

Fourth, the practical significance of these regime factors is lower compared to that of repertoire of contention. To gauge the practical effects, we can compare the highest and lowest adjusted probabilities corresponding to the range between the 25th and 75th percentiles in the Democracy graph in Figure 3. The probability of actors choosing violent tactics changes by .04 (from .44 at the peak of the curve where the democracy score is about .48 to .40 at the 75th percentile point where the democracy score is .79). The probability of protest selection changes by .07 (from .33 at the peak and .27 at the 75th percentile point). The probability of using convention changes by .10 (from .24 at the bottom of the U-shaped curve to .34 at the 75th percentile point). Similarly, in the case of the State Capacity variable in Figure 3, the adjusted probability of violence as the tactical choice changes by .03 (from .41 at the 25th percentile to .38 at the 75th percentile), while protest and convention selection change by .01 (from .28 to .27) and .04 (from .31 to .35), respectively. These changes in probabilities are much smaller than the changes we found for the repertoire familiarity variables (.14 increase for protest familiarity and .36 increase for violence familiarity). We argue that this finding gives substantial evidence that the effects of repertoires of contention on tactical choice weighs more than the effects of political regime characteristics.

5. DISCUSSION

5.1. Implications of the findings

This study makes a critical conceptual distinction between the actual tactics chosen by actors at the moment of contention and the repertoires of tactics as knowledge. This conceptual distinction helps empirically examine whether repertoires influence tactical selection and, if they do, to what extent. We have theorized repertoires of contention as a cultural toolkit of tactics which people learn through multiple mechanisms such as feedback, diffusion, and memory. We have then operationalized the repertoire concept and proposed a measure of tactical familiarity. To find answers to our main research question – what is the most important predictor of tactical choice, institutional regime characteristics or repertoires of contention? – we took advantage of the 10 MIDE database which covers the broadest range of tac-

tics including conventions, unlike most event databases collecting protests and/or violence only.

Our main discovery has been that repertoires of contention do matter in explaining tactical choice. We argue that repertoires facilitate actors' decisions to employ tactics that are familiar to them and, at the same time, constrain their attempts to implement unfamiliar ones. The degrees of protest and violence familiarity account for a substantial part of the variation in tactical patterns.

Our second discovery is that the effects of repertoires of contention are greater than those of regime characteristics on tactical selection at the moments of struggle based on the comparison of practical impacts of these variables, that is, by looking at changes in the adjusted probabilities of tactical choice between the 25th and 75th percentiles of the variables. The adjusted probability of choosing protest tactics increased by .14 for the protest familiarity variable while the probability of choosing violent tactics increased by .36 for the violence familiarity variable. On the other hand, the probabilities changed only moderately between .01-.07 with changes in democracy or state capacity. Yet it should be noted that we did find significant associations between regime characteristics and tactical choice, which is not a trivial accomplishment.

Third, we discovered two intriguing relationships between repertoires of contention and tactical choice. The first is that, when actors' protest familiarity increases, protests are more likely to be chosen *at the expense of violence* but not of convention¹³. People often think that violence is an extreme radical extension of protest strategies, but this is probably not true for many actors. Those who use protest tactics frequently are less inclined to resort to violence. This result implies that many of these actors have a strong commitment to nonviolent protest tactics and refuse to fall into violent options. This might link with the issue of tactical value, another cultural dimension of repertoires of contention discussed in the literature section.

The second relationship is that, when violence familiarity increases, violent tactics are more likely to be chosen *at the expense of convention* rather than of protest. Those who routinely employ violence are much less likely than others to use convention. This suggests that, while violent actors use protest tactics as often as nonviolent actors do, they tend to turn away from conventional tactics. For violent actors, institutional political rules and procedures are not something to be appreciated, respected, or regarded as practically attractive. These two relationships between repertoires of contention and

tactical choice are additional insights obtained from our regression analysis.

5.2. Future improvements

There are several issues for the improvements and for the future study. First, the analysis can be nuanced by using more detailed and concrete tactical categories than the three broad categories (convention, protest, and violence) we used. We still believe that this three-category classification is of value because people are much less likely to learn tactics across different categories; but it might not be fully satisfactory taking into account that many studies of repertoires of contention often examine more concrete tactics such as demonstrations (Somma and Medel 2019), shantytowns (Soule 1997), factory recuperations (Itzigsohn and Rebón 2015), candlelight vigils (Hwang and Willis 2020), or picketings (Rossi 2017). In fact, the 10 MIDE database keeps records of tactics at more concrete levels. Technically speaking, to implement the same regression analysis using more specific categories is possible. Roadblocks ahead would be the need for much greater computing power and increased complexity in presenting the results.

Second, readers might wonder if our evidence may simply suggest that the recently employed tactics are used again. How do we know that using the same tactic now as in the past is explicable by familiarity than by rational decision? On this issue of potential endogeneity problem, we admit that our empirical operationalization of the concept of repertoire familiarity is still exploratory and will need further refinement. Most importantly, the concepts of tactical value and tactical norm need to be incorporated into future analyses since tactical familiarity is not the only cultural dimension of repertoires of contention. Although it would be difficult to gather information about tactical value (i.e., actors find more value in certain tactics than others) and tactical norm (i.e., actors believe certain tactics are more socially appropriate than others) directly from event data, it might be possible to construct measures of these dimensions through other methods such as opinion surveys and to combine them with event data. Furthermore, as we discussed, familiarity and rationality are not mutually exclusive. Tactical familiarity is the basis of rational calculation, consciously or unconsciously, by making certain tactics easier to employ and others more costly or even unimaginable.

Third, the model could be refined further by incorporating additional learning mechanisms. Due to the data limitation, it was not viable for us to embed all the ideas

¹³. This finding is actually consistent with some earlier research (Myers 2010: 312).

about three main mechanisms into our study¹⁴. As for the diffusion mechanism, there are different ways of learning other than the structural equivalence we embodied in our model as studies of tactical diffusion have identified a variety of relational mechanisms (e.g., brokerage) and non-relational mechanisms (e.g., media) (Givan, Roberts and Soule 2010). How to integrate such mechanisms into analysis will be a challenge for future projects. When it comes to the feedback mechanism, researchers could utilize an event database with more detailed information about actors (i.e., proper names of the groups and organizations in action), as done by King and Cornwall's longitudinal study of the women suffrage movement in the United States (King and Cornwall 2005). Lastly, the memory mechanism has a variety of pathways to remember things, such as remembering more shocking events better than mundane ones (Baumgarten 2017; Della Porta 2018: 464). Memories of tactics employed in impactful events, even ones that happened a long time ago, are likely to stay more vividly in actors' minds than other tactics (i.e., legacy effects). The strength of qualitative methods is pronounced to uncover mechanisms of this type, and yet there is much leeway for quantitative event analysis as well. We could use, for example, "geographical proximity" to model cross-national learning processes and "linguistic adjacency" to specify cultural learning processes where learning takes place via the same language.

The fourth issue concerns the levels at which we analyze repertoires of contention, both conceptually and methodologically. Some studies delve into repertoires at specific and concrete levels, such as individual activists (Schneider Marques 2017), while others examine them at broad and abstract levels, encompassing societies or countries (Echegaray 2015). Many studies operate somewhere in between, focusing on collectivities of different kinds, such as young people (Barbosa *et al.* 2014), workers (Itzigsohn and Rebón 2015), labor unions (Kerrissey and Schofer 2018:427), movements (Edelman and León 2013), organizations (Rossi 2015), as well as our country-actor categories. There is no clear consensus on the appropriate level, and it is probably undesirable to impose a single level on all studies. Nonetheless, we should be mindful of the potential implications of our choice regarding the level of analysis. For instance, Franklin (2013) explores whether Tilly's original idea of repertoires of contention, framed as a limited variety of

tactical forms (the strong repertoire hypothesis), is more valid at a narrow and concrete level (e.g., campaign participants) or at a broad and abstract level (e.g., country). His findings indicate that the more concrete the level at which scholars measure repertoires of contention, the stronger the effect of repertoires on tactical choices.

Finally, it would be beneficial to validate our findings by using different event datasets (e.g., GDELT, the World Handbook of Political Indicators IV, or the Armed Conflict Location & Event Data Project). While it may not be possible to include conventional tactics in an analysis based on such datasets – because most event datasets do not contain such information – we could still conduct interesting validation tests using these datasets of protest and violent events, especially if we adopt finer tactical categories as we have previously discussed.

REFERENCES

- Alimi E. Y. (2014), «Repertoires of Contention», in D. Della Porta, M. Diani (eds.), *The Oxford Handbook of Social Movem, (ents)*, Oxford University Press (Oxford Handbooks Online), Oxford.
- Andrews K. T. and Biggs M. (2006), «The Dynamics of Protest Diffusion: Movement Organizations, Social Networks, and News Media in the 1960 Sit-Ins», in *American Sociological Review*, 71(5): 752-777.
- Armstrong E. A. and Cragge S. M. (2006), «Movements and Memory: The Making of the Stonewall» Myth, in *American Sociological Review*, 71(5): 724-751.
- Bandura A. (1973), *Aggression: A Social Learning Analysis*, Prentice-Hall, Oxford, England.
- Bandura A. (1977), *Social Learning Theory*, Prentice-Hall, New Jersey.
- Barbosa L., Portilho, F., Wilkinson, J. and Dubeux, V. (2014), «Trust, Participation and Political Consumerism among Brazilian Youth», in *Journal of Cleaner Production*, 63: 93-101.
- Barranco J. and Wisler D. (1999), «Validity and Systematicity of Newspaper Data in Event Analysis», in *European Sociological Review*, 15(3): 301-322.
- Baumgarten B. (2017), «The Children of the Carnation Revolution? Connections between Portugal's Anti-Austerity Movement and the Revolutionary Period 1974/1975», in *Social Movement Studies*, 16(1): 51-63.
- Bond D., Bond J., Oh C., Jenkins J. C. and Taylor C. L. (2003), «Integrated Data for Events Analysis (IDEA): an event typology for automated events data development», in *Journal of Peace Research*, 40(6): 733-745.
- Bosi L. and Zamponi L. (2020), «Paths toward the Same Form of Collective Action: Direct Social Action in

¹⁴ Once scholars successfully develop three distinct indicators, one for each mechanism, it would be worthwhile to evaluate the significance of the three mechanisms that generate repertoires of contention. To complicate the matter, however, the three main mechanisms of feedback, diffusion, and memory are often interdependent, as King and Cornwall discuss (King and Cornwall 2005: 27).

- Times of Crisis in Italy^{1,2}», in *Social Forces*, 99(2): 847-869.
- Burt R. S. (1987), «Social Contagion and Innovation: Cohesion versus Structural Equivalence», in *American Journal of Sociology*, 92(6): 1287-1335.
- Chabot S. (2010), «Dialogue Matters: Beyond the Transmission Model of Transnational Diffusion between Social Movements», in Givan R. K., Roberts K. M., Soule S. A. (eds.), *The Diffusion of Social Movements: Actors, Mechanisms, and Political Effects*, Cambridge University Press, New York, pp. 99-124.
- Cheng E. W. and Yuen S. (2019), «Memory in Movement: Collective Identity and Memory Contestation in Hong Kong's Tiananmen Vigils», in *Mobilization*, 24(4): 419-437.
- Chenoweth E. and Stephan M. (2011), *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*, Columbia University Press, New York.
- Cingolani L. (2018), «The Role of State Capacity in Development Studies», in *Journal of Development Perspectives*, 2(1-2): 88-114.
- Coe A. B. and Sandberg L. (2019), «Gender Beliefs as a Dimension of Tactical Choice: the 'Take Back the Night' March in Sweden», in *Social Movement Studies*, 18(5): 622-638.
- Coppedge M., Gerring J., Knutsen C. H., Lindberg S. I., Teorell J., Altman D., Bernhard M., Fish M. S., Glynn A., Hicken A., Luhrmann A., Marquardt K. L., McMann K., Paxton P., Pemstein D., Seim B., Sigman R., Skaaning S.-E., Staton J., Wilson S., Cornell A., Alizada N., Gastaldi L., Gjerløw H., Hindle G., Ilchenko N., Maxwell L., Mechkova V., Medzihorsky J., Römer J. von, Sundström A., Tzelgov E., Wang Y., Wig T. and Ziblatt D. (2020), *V-Dem [Country-Year/Country-Date] Dataset v10*.
- Crossley N. (2002), «Repertoires of Contention and Tactical Diversity in the UK Psychiatric Survivors Movement): The Question of Appropriation», in *Social Movement Studies*, 1(1): 47-71.
- Della Porta D. (2013), «Repertoires of Contention», in D. A. Snow, D. Della Porta, B. Klandermans, D. McAdam (eds.), *The Wiley-Blackwell Encyclopedia of Social and Political Movements*, Wiley, Malden, MA, pp. 1081-1083.
- Della Porta D. (2018), «Radicalization): A Relational Perspective», in *Annual Review of Political Science*, 21(1): 461-474.
- Della Porta D. and Diani M. (2006), *Social Movements: An Introduction*, Blackwell Publishing, Malden, MA.
- Echegaray F. (2015), «Voting at the marketplace): Consumerism in Latin America», in *Latin American Research Review*, 50(2): 176-199.
- Edelman M. and León A. (2013), «Cycles of Land Grabbing in Central America): an argument for history and a case study in the Bajo Aguan, Honduras», in *Third World Quarterly*, 34(9): 1697-1722.
- Eisinger P. K. (1973), «The Conditions of Protest Behavior in American Cities», in *American Political Science Review*, 67(1): 11-28.
- Franklin J. C. (2013), «Repertoires of Contention and Tactical Choice in Latin America, 1981-1995», in *Research in Social Movements, Conflicts and Change*, 35(1): 175-208.
- Gade T. (2019), «Together All the Way? Abeyance and Co-optation of Sunni Networks in Lebanon», in *Social Movement Studies*, 18(1): 56-77.
- Galli A. M. (2016), «How Glitter Bombing Lost Its Sparkle): The Emergence and Decline of a Novel Social Movement Tactic», in *Mobilization*, 21(3): 259-281.
- Gamson W. A. and Meyer D. S. (1996), «Framing Political Opportunity», in D. McAdam, J.D. McCarthy, M. N. Zald (eds.), *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*, Cambridge University Press, Cambridge, pp. 275-290.
- Givan R. K., Roberts K. M. and Soule S. A. (2010), «Introduction: The Dimensions of Diffusion», in Ead. (eds.), *The Diffusion of Social Movements: Actors, Mechanisms, and Political Effects*, Cambridge University Press, New York, pp. 1-15.
- Goldstein J. S. (1992), «A Conflict-cooperation Scale for WEIS Events Data», in *Journal of Conflict Resolution*, 36(2): 369-385.
- Hendrix C. S. (2010), «Measuring State Capacity): Theoretical and Empirical Implications for the Study of Civil Conflict», in *Journal of Peace Research*, 47(3): 273-285.
- Hocke P. (1998), «Determining the Selection Bias in Local and National Newspaper Reports on Protest Events», in D. Rucht, R. Koopmans, F. Neidhardt (eds.), *Acts of Dissent): New Developments in The Study of Protest*, Edition Sigma, Berlin, pp. 131-163.
- Hwang I. and Willis C. N. (2020), «Protest by Candlelight): A Comparative Analysis of Candlelight Vigils in South Korea», in *Journal of Civil Society*, 16(3): 260-272.
- Itzigsohn J. and Rebón J. (2015), «The Recuperation of Enterprises Defending Workers' Lifeworld, Creating New Tools of Contention», in *Latin American Research Review*, 50(4): 178-196.
- Jansen G., Sluiter R. and Akkerman A. (2016), «The Diffusion of Strikes): A Dyadic Analysis of Economic Sectors in the Netherlands, 1995-2007», in *American Journal of Sociology*, 121(6): 1885-1918.

- Jasper J. M. (1997), *The Art of Moral Protest: Culture, Biography, and Creativity in Social Movements*, University of Chicago Press, Chicago.
- Johnston H. (2012), «State Violence and Oppositional Protest in High-Capacity Authoritarian Regimes», in *International Journal of Conflict and Violence*, 6(1): 55-74.
- Katsanidou A. and Eder C. (2018), «Vote, Party, or Protest): The Influence of Confidence in Political Institutions on Various Modes of Political Participation in Europe», in *Comparative European Politics*, 16(2): 290-309.
- Kerrissey J. and Schofer E. (2018), «Labor Unions and Political Participation in Comparative Perspective», in *Social Forces*, 97(1): 427-463.
- King B. G. and Cornwall M. (2005), «Specialists and Generalists): Learning Strategies in the Women Suffrage Movement, 1866-1918», in *Research in Social Movements, Conflicts and Change*, 26)): 3-34.
- King G. and Lowe W. (2008), *10 Million International Dyadic Events*. <https://doi.org/10.7910/DVN/BTMQA0>, Harvard Dataverse, V5, UNF:3:dSE0bsQK2o6xXlxeaDEhcg== [fileUNF]. Accessed 14.06.2011.
- Kitschelt H. P. (1986), «Political Opportunity Structures and Political Protest – Antinuclear Movements in 4 Democracies», in *British Journal of Political Science*, 16)): 57-85.
- Kriesi H. (1995), «The Political Opportunity Structure of New Social Movements): Its Impact on Their Mobilization», in J. C Jenkins, B. Klandermans (eds.), *The Politics of Social Protest): Comparative Perspectives on States and Social Movements*, University of Minnesota Press, Minneapolis, pp. 167-198.
- Lee J. C. H., Wong Chin H., Wong M. and Yeoh Seng G. (2010), «Elections, Repertoires of Contention and Habitus in Four Civil Society Engagements in Malaysia's 2008 General Elections», in *Social Movement Studies*, 9(3): 293-309.
- Maher T. V. and Peterson L. (2008), «Time and Country Variation in Contentious Politics», in *International Journal of Sociology*, 38(3): 52-81.
- McAdam D. and Rucht D. (1993), «The Cross-National Diffusion of Movement Ideas», in *The ANNALS of the American Academy of Political and Social Science*, 528(1): 56-74.
- Meyer D. S. and Minkoff D. C. (2004), «Conceptualizing Political Opportunity», in *Social Forces*, 82(4): 1457-1492.
- Moore K. and Shepard B. (2013), «Direct Action», in D. A. Snow, D. della Porta, B. Klandermans, D. McAdam (eds.), *The Wiley-Blackwell Encyclopedia of Social and Political Movements*, Wiley, Malden, MA, pp. 353-357.
- Muller E. N. and Seligson M. A. (1987), «Inequality and Insurgency», in *American Political Science Review*, 81(2): 425-451.
- Muller E. N. and Weede E. (1990), «Cross-National Variation in Political Violence): A Rational Actor Approach», in *Journal of Conflict Resolution*, 34)): 624-651.
- Myers D. J. (2010), «Violent Protest and Heterogeneous Diffusion Processes): The Spread of U.S. Racial Rioting from 1964 to 1971», in *Mobilization*, 15(3): 289-321.
- Oliver P. E. and Myers D. J. (2003), «Networks, Diffusion, and Cycles of Collective Action», in M. Diani, D. McAdam (eds.), *Social Movements and Networks): Relational Approaches to Collective Action*, Oxford University Press, Oxford, pp. 173-203.
- Olzak S. (2006), *The Global Dynamics of Racial and Ethnic Mobilization*, Stanford University Press, Stanford.
- Polletta F. (2012), «Three Mechanisms by Which Culture Shapes Movement Strategy): Repertoires, Institutional Norms, and Metonymy», in G. M. Maney, R. V. Kutz-Flamenbaum, D. A. Rohlinger, J. Goodwin (eds.), *Strategies for Social Change*, University of Minnesota Press, Minneapolis, pp. 43-58.
- Quaranta M. (2018), «Repertoires of Political Participation): Macroeconomic Conditions, Socioeconomic Resources, and Participation Gaps in Europe», in *International Journal of Comparative Sociology*, 59(4): 319-342.
- Ring-Ramirez M., Reynolds-Stenson H. and Earl J. (2014), «Culturally constrained contention): Mapping the meaning structure of the repertoire of contention», in *Mobilization*, 19(4): 405-419.
- Rolfe B. (2005), «Building an Electronic Repertoire of Contention», in *Social Movement Studies*, 4(1): 65-74.
- Rossi F. M. (2015), «Conceptualizing Strategy Making in a Historical and Collective Perspective», in F. M. Rossi, M. von Bülow (eds.), *Social Movement Dynamics): New Perspectives on Theory and Research from Latin America*, Ashgate, Surrey, pp. 15-41.
- Rossi F. M. (2017), *The Poor's Struggle for Political Incorporation): The Piquetero Movement in Argentina*, Cambridge University Press, Cambridge, New York.
- Sánchez-Cuenca I. and La Calle L. de (2009), «Domestic Terrorism): The Hidden Side of Political Violence», in *Annual Review of Political Science*, 12(1): 31-49.
- Schneider Marques T. C. (2017), «O Exílio e as Transformações de Repertórios de Ação Coletiva): A Esquerda Brasileira no Chile e na França (1968-1978)», in *Dados-Revista De Ciencias Sociais*, 60(1): 239-279.

- Shove E., Pantzar M. and Watson M. (2012), *The Dynamics of Social Practice: Everyday Life and How It Changes*, SAGE Publications Ltd, London.
- Skocpol T. (1979), *States and Social Revolutions: A Comparative Analysis of France, Russia, and China*, Cambridge University Press, Cambridge, New York.
- Skrede Gleditsch K. and Ruggeri A. (2010), «Political opportunity structures, democracy, and civil war», in *Journal of Peace Research*, 47(3): 299-310.
- Somma N. M. and Medel R. M. (2019), «What Makes a Big Demonstration? Exploring the Impact of Mobilization Strategies on the Size of Demonstrations», in *Social Movement Studies*, 18(2): 233-251.
- Soule S. A. (1997), «The Student Divestment Movement in the United States and Tactical Diffusion): The Shantytown Protest», in *Social Forces*, 75(3): 855-882.
- Strang D. and Meyer J. W. (1993), «Institutional Conditions for Diffusion», in *Theory & Society*, 22(4): 487-511.
- Swidler A. (1986), «Culture in Action): Symbols and Strategies», in *American Sociological Review*, 51(2): 273-286.
- Tarrow S. (2011), *Power in Movement): Social Movements and Contentious Politics*, Cambridge University Press, New York.
- Taylor V. and van Dyke N. (2004), «‘Get up, Stand up’): Tactical Repertoires of Social Movements», in D. A. Snow, S. A. Soule, H. Kriesi (eds.), *The Blackwell Companion to Social Movements*, Blackwell Publishing, Malden, pp. 262-293.
- Tilly C. (1995a), «Contentious Repertoires in Great Britain, 1758-1834», in M. Traugott (ed.), *Repertoires and Cycles of Collective Action*, Duke University Press, Durham, pp. 15-42.
- Tilly C. (1995b), *Popular Contention in Great Britain, 1758-1834*, Harvard University Press, Cambridge.
- Tilly C. (2006), *Regimes and Repertoires*, University of Chicago Press, Chicago.
- Tilly C. (2008), *Contentious Performances*, Cambridge University Press, Cambridge.
- Tilly C., Tarrow S. (2015), *Contentious Politics*, Oxford University Press, Oxford.
- Wada T. (2016), «Rigidity and Flexibility of Repertoires of Contention», in *Mobilization*, 21(4): 449-468.
- Wang D. J. and Soule S. A. (2012), «Social Movement Organizational Collaboration): Networks of Learning and the Diffusion of Protest Tactics, 1960-1995», in *American Journal of Sociology*, 117(6): 1674-1722.
- Zamponi L. (2018), *Social Movements, Memory and Media): Narrative in Action in the Italian and Spanish Student Movements*, Springer International Publishing AG, Cham, Switzerland.

APPENDICES

A) How to Filter Contentious Events from the 10 MIDE Database

As outlined in our manuscript, the “10 Million International Dyadic Events”, abbreviated as the 10 MIDE database, available from Harvard Dataverse (King and Lowe 2008), employs a comprehensive ontology comprising 249 event types,¹⁵ which are derived from the Integrated Data for Events Analysis (IDEA) event codes¹⁶. This database thereby presents extensive opportunities for the investigation of contentious political events. In this appendix, we first explain the construction of the 10 MIDE database, followed by an explication of methods to filter contentious political events for analysis. Subsequently, we delve into its advantages for our analysis in comparison to other databases.

As an example of how the 10 MIDE database was built from texts, a sample lead is shown below (King and Lowe 2003: 620).

Russian artillery^S south of the Chechen capital Grozny *blasted*²²³ *Chechen positions*^T overnight before falling silent at dawn, witnesses said on Tuesday.

The word *blasted* is given the event code 223, which denotes military engagement, and the word sequences, *Russian artillery* and *Chechen positions*, are tagged S and T, respectively, meaning the subject actor and the target actor.

From the 10 MIDE database, we extracted the events of contentious politics we wanted to focus on for purposes of our analysis in five steps. First, we excluded 58 of the 249 event types in the database that are unrelated to political activities, such as natural disasters, market transactions, sports contests, and cultural events. Second, we further narrowed down our scope by selecting only events in which tactics or forms of action are explicit. Some event codes such as “complain”, “demand”, and others do not tell us explicitly *how* these tactics or actions were carried out. Our conservative approach excluded these events from our analysis as our main concern was to investigate specific and concrete forms of contention.

Third, we also excluded events in which state agents or military actors could be assumed to be the subject actor, shown in such codes as “armed force occupation”, and “nuclear attack”, among others. Fourth, we

then selected events by the particular nature of the subject and target actors. We retained events in which the subject actors are civil society groups of the country in which the events occur¹⁷. We further selected events in which the target actors are either state agents, civil society groups, foreign state agents, or foreign civil society groups¹⁸. Lastly, only events in the database between 2000 and 2004 were selected. As explained in “3.2. Main Variables of the Study” in the article, the first ten years of data in the 10 MIDE database, from 1990 to 1999, were used for the purpose of generating tactical familiarity variables. Thus, the final and total number of events included in our analysis is 17,575.

There are two important advantages of using the 10 MIDE database. First, it enables us to examine country-level factors such as regime characteristics because it includes all countries around the world in its data. Second, it gives us a unique opportunity to compare the use of conventional tactics with that of protest and violent tactics. Unlike many event databases that focus on protests and/or violence exclusively, the 10 MIDE database contains information about all forms of action, including conventional and institutional forms of claim-making.

One might have doubts about computer-automated coding systems. However, King and Lowe (2003) found that for the small number of texts that humans (trained Harvard undergraduates) were able to code by hand, a computer performed as well as humans in terms of coding accuracy. For much larger numbers of events (with which no expert human coder would be able to keep up), a computer with its stable and replicable performance would therefore prove much more successful (King and Lowe 2003: 636-37).

Still, technological improvements are required insofar as computers have a higher propensity “to find events” when none exist in news reports. Nonetheless, as King and Lowe (2003: 636) point out, this shortcoming “is strongly counterbalanced by both the fact that these

¹⁷ Civil society groups are classified under the sector code “CIVS” in the 10 MIDE database.

¹⁸ In the 10 MIDE database, there are also “non-agent” actor categories. These categories include beliefs (e.g., “human attitudes”, “ideology”, “protest altruism”), accidents and natural disasters (e.g., “infectious disease”, “drought”, “earthquakes”, “mine explosions”, “tornados”), human activities (e.g., “communication”, “assassinations”, “legislation”, “bombing action”, “military actions”, “protest actions”, “rapes”), and other types (i.e., “animals”, “historical figures”, “polls & surveys”, “foods”, “interest rates”). These categories are not the ordinary subject and target agents we usually expect. The computer-automated information extraction system sometimes assigns these categories as Subject or Target. It is possible that there are real human agents – individuals, groups, or organizations – in these events. Certain human activities such as military actions and rapes can be legitimate targets of contention. We decided to exclude these “non-agent” categories from our analysis to make sure that the data we analyzed was about contentious interactions between human agents.

¹⁵ “10 Million International Dyadic Events”, Harvard Dataverse website (<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/BTMQA0>).

¹⁶ Refer to the Virtual Research Associate website for further information about the IDEA event codes (<http://vranet.com/idea/>; accessed on June 12, 2020).

false events are not correlated with the degree of conflict of the event category, and by the overwhelming strength of the machine: the ability to code a huge number of events extremely quickly and inexpensively.”

Other database options might have been selected for our study such as The World Handbook of Political Indicators IV (WHIV), the Integrated Crisis Early Warning System (ICEWS), or the Global Database of Events, Language, and Tone (GDELT), an event database with over a quarter-billion records from 1979 to the time of writing (i.e., 2021). There are reasons why we did not go with any of these, however. Although the WHIV is a cleaner contentious politics subset of the 10 MIDE

database (Jenkins *et al.* 2012), we did not use it because it does not include events in which civil society actors employed conventional tactics. As for the ICEWS and GDELT, while they are attractive given their data coverage of recent years and their use of a multiplicity of news sources, we were unable to solve the problem raised by both of multiple identification of single events due to reprints and corrections to earlier stories, and to reports of the same events by different sources (Jenkins and Maher 2016; Lorenzini *et al.* 2022). In a future study, it would be fascinating to use the WHIV, ICEWS, GDELT, and possibly other databases to triangulate our research and arrive at more robust findings.

B) Classification of Tactics

Category	Event codes			N 17,575
	Code	Name	Description	
Violence	AERI	Missile attack	Launching of intermediate to long-range conventional ballistic missiles and aerial dropping of conventional explosive devices or bombs.	149
	ASSA	Assassination	Murder that is explicitly characterized as political killing and assassination.	135
	BEAT	Beatings	Beatings (physical assaults without the use of weapons).	146
	CBIO	Chem-bio attack	Use of chemical or biological weapons.	5
	CBRU	Unconventional weapons attack	All uses of Weapons of Mass Destruction (WMD), including chemical, biological, radiological and nuclear weapons use, not otherwise specified.	0
	CLAS	Armed battle	Initiation of armed hostilities or engagement between two or more armed forces, including truce violations (used as default for war and battles).	1081
	CONC	Crowd control	Mobilization or use of compliance force by police, military and others for crowd control.	9
	CORP	Bodily punishment	Infliction of bodily injury, death or pain for the explicit purpose of punishment.	132
	COUP	Coups and mutinies	Coups, mutinies and other rebellions by armed forces.	52
	GRPG	Artillery attack	Use of short to intermediate range tank-mounted, ship-based or field guns and cannons, mortars and rocket-propelled grenades.	346
	MAIM	Torture	Maiming and all other reports explicitly characterized as torture.	48
	MINE	Mine explosion	Land and underwater mine explosions.	13
	PASS	Physical assault	All uses of non-armed physical force in assaults against people not otherwise specified.	1031
	PEXE	Small arms attack	Shooting of small arms, light weapons and small explosives, including the use of all handguns, light machine guns, rifles and hand grenades.	2775
	RAID	Armed actions	Ambiguous initiation of the use of armed forces to fire upon another armed force, population or territory.	1017
	RIOT	Riot	Civil or political unrest explicitly characterized as riots.	316
	SBOM	Suicide bombing	A bombing in which the bomber perishes during detonation of the explosive.	257
SEXA	Sexual assault	Rape and other sexual assaults.	2	
VBOM	Vehicle bombing	Bombing explicitly characterized as a vehicle bombing (car bombing, etc.), except for suicide bombings, which are coded separately.	73	
Protest	ABDU	Abduction	Abducting, hijacking and capturing of people.	25
	DEFY	Defy norms	Open defiance of laws and norms, civil disobedience. Also includes the establishment of alternative institutions.	201
	HTAK	Hostage taking and kidnapping	Hostage taking or kidnapping of people.	805
	JACK	Hijacking	All commandeerings of vehicles.	1

Category	Event codes			N 17,575
	Code	Name	Description	
Protest	PALT	Protest altruism	Protest demonstrations that place the source (protestor) at risk for the sake of unity with the target of contention.	10
	PDEM	Protest demonstrations	All protest demonstrations not otherwise specified.	864
	PMAR	Protest procession	Picketing and other parading protests.	357
	POAR	Political arrests	Arrests and detentions explicitly characterized as political.	94
	POBS	Protest obstruction	Sit-ins and other non-military occupation protests.	132
	PPRO	Protest defacement	Damage, sabotage and the use of graffiti to desecrate property and symbols.	128
	REDR	Reduce routine activity	Reduction of routine and planned activities, including cancellations, recalls and postponements typically presented as a protest against the routine.	1127
	SRAL	Rally support	Gatherings to express or demonstrate support, celebrations and all other public displays of confidence; protest vigils and commemorations.	153
	STRI	Strikes and boycotts	Labor and professional sanctions reported as strikes, general strikes, walkouts, withholding of goods or services and lockouts.	512
	TDIS	Armed force troops display	Public demonstrations, maneuvers, exercises or testing land-based armed forces not involving combat operations.	22
Convention	FCOM	Formal complaints	Written and institutionalized protests and appeals, and all petition drives and recalls.	454
	LITI	Judicial actions	Judicial actions.	2573
	SOLS	Solicit support	Requests for political support or solicitations of political influence, including electoral campaigning and lobbying.	2194
	VOTE	Elect representative	Voting and electing representatives.	336

Some codes such as armed battle (CLAS), crowd control (CONC), political arrests (POAR), and armed force troops display (TDIS) appear similar to the tactics usually employed by state agents. We decided to keep them in our analysis if the subject actors in these events are social agents.

C) Control Variables

In this appendix, we expound upon control variables in our analysis. By drawing insights from extant research, we illuminate their associations with tactical choices. Following this, we elucidate the operationalization of each individual variable, along with data source.

Target and field of contention. Existing studies suggest the possibility that claimants prefer to use different tactics depending on whom they target (Adams and Shriver 2016) and on the “field” of struggle they are in (e.g., educational field, medical field, corporate field) (Armstrong and Burnstein 2008; Taylor 1996). Walker, Martin, and McCarthy (2008) argue that movement actors employ different tactics depending on their targets’ strength and vulnerabilities. Movement actors tend to utilize more routinized and less disruptive forms of action against the state, while they employ more radical and disruptive forms of action against non-state targets once they consider these targets’ repressive, facilitating, channeling, and routinizing capacities for response (*Ibidem*: 43). Likewise, Medel Sierralta and Somma González (2016: 186) find in their study of protest events in Chile that «when the target is the State the use of restrained tactics is prioritized, while when the target is

a private company (national or international) or an educational institution, transgressive tactics are prioritized».

In the 10 MIDE database, one target is assigned to each event. We classify these targets into four types: domestic state targets (n=9168, 52% of all targets selected), domestic civil society (non-state) targets (6989, 40%), foreign state targets (923, 5%), and foreign civil society targets (495, 3%).

Social cleavages. When a society is divided along class, religious, or ethnic lines, that society has a higher risk of disruptive and violent conflicts once these divisions are politically activated (Kriesi *et al.* 1995). Class cleavage still matters in street demonstration participation (Eggert and Giugni 2015), multiethnicity triggers domestic conflicts (Ellingsen 2000), and religious factors fuel violence (Basedau, Pfeiffer, and Vüllers 2016).

As measures of religious and ethnic cleavages, our study uses religious fractionalization (SOC09) and ethnic fractionalization (SOC10) from a dataset *Cross-National Research on USAID’s Democracy and Governance Programs Phase II* (hereafter USAID) (Finkel *et al.* n.d.). These measures are the averages of the Annett (2001) and Fearon and Laitin (2003) indices of religious and ethnolinguistic fractionalization respectively (Finkel *et al.* n.d.: 66). A value of 0 denotes perfect homogeneity

while a value of 1 indicates extreme fractionalization. As a measure of class cleavage, we used the equal distribution of resources index (*v2xeg_eqdr*) from the V-DEM dataset. This index measures the extent to which different kinds of resources – goods and services such as food, water, housing, education, healthcare, welfare programs, both tangible and intangible – are distributed in society¹⁹. This index ranges from unequal (0) to equal (1).

Material resources. Resource mobilization theorists such as McCarthy and Zald (1977) have claimed that the availability of material resources is instrumental in the dynamics of protest mobilization. In this logic, high income societies are more capable than resource-poor societies of providing political activists with material resources for mobilization (Tarrow 2011: 24).

We have used gross domestic product per capita (*GDP per capita*), constructed by dividing GDP (*DEV02I*) by population (*SOC01*), as a measure of a country's material resources and economic development. The information about these variables comes from the USAID dataset. The natural log is taken to address the skewed distributions. In Table 1 in the article, descriptive statistics of the original variable before the log transformation are reported.

Globalization. Two contradictory effects of globalization on tactical choice have been observed. On the one hand, studies on neoliberal austerity reforms and “IMF riots” (Walton and Seddon 1994) show that integration into the global economy triggered anti-austerity violence especially in the developing world. The privatization of industries and public utilities as well as free trade agreement policies stimulated anti-market protest mobilizations (Almeida and Pérez Martín 2020). On the other hand, a higher degree of dependence on the global economy has been associated negatively with occurrences of protests and violence because market policies and neoliberal economic reforms likely disarticulate, weaken, and demobilize popular groups (Castells 2010; Roberts 2008).

To measure a country's degree of globalization or its degree of integration into world economy, we have used the KOF Globalisation Index (Gygli *et al.* 2019)²⁰. This is a composite index measuring globalization along economic, social, and political dimensions for every country in the world from 1970 on.

Associational strength of civil society. The theory of mobilizing structure emphasizes that the durable structure of social solidarity will help protest activities endure beyond politically favorable moments (Staggenborg 1988). Minkoff (2016) verifies that voluntary organizational membership is conducive to unconventional political actions (protests) in advanced democracies.

As per USAID, we have used the Index of Conditions for Civil Society (CS08) as a measure of civil society's associational strength. Scores approaching 100 indicate a highly autonomous and vibrant civil society; scores approaching 0 indicate low civil society autonomy; and a score of 50 represents an average autonomy level (Finkel *et al.* n.d., 50).

Macroeconomic conditions. Economic downturns and recessions are likely to stimulate protests. Using multilevel multinomial regression analysis of tactics based on the European Social Survey datasets, Quaranta (2018) finds that, under poor macroeconomic conditions (i.e., high unemployment, poor growth, large deficit, and high inflation), the probability of a specific tactical choice of “engaging in protests but not engaging conventions (i.e., voting)” increases.

Macroeconomic conditions are captured in our study by stating a country's annual economic growth rate of GDP per capita as a percentage (*PRF01* in USAID). Missing values were imputed using the imputation model (Finkel *et al.* n.d.).

Media attention. The effect of media attention needs to be controlled. In cross-national comparative studies, it is particularly important to consider this issue because the global newswire's attention varies greatly by country (Lorenzini *et al.* 2022). Reasons for the variation in the media attention a country receives can include population size, the country's geopolitical importance in the international system, the location of media correspondents, and so on. We hypothesize that, when media interest in a country is low, it is likely that the media will tend to focus on “newsworthy” events (Kielbowicz and Scherer 1986). Eye-catching protest performances and eruptions of violence will have more news value than everyday conventional political events (Barranco and

¹⁹ This index is estimated by a Bayesian factor analysis model of the four indicators (the variable name in the dataset and the question to build the variables in parenthesis): (1) particularistic or public goods (*v2dlencmps*: Considering the profile of social and infrastructural spending in the national budget, how “particularistic” or “public goods” are most expenditures?); (2) means tested vs. universalistic welfare policies (*v2dlunivl*: How many welfare programs are means-tested and how many benefit all (or virtually all) members of the polity?); (3) educational equality (*v2peedueq*: To what extent is high quality basic education guaranteed to all, sufficient to enable them to exercise their basic rights as adult citizens?); and (4) health equality (*v2pehealth*: To what extent is high quality basic healthcare guaranteed to all, sufficient to enable them to exercise their basic political rights as adult citizens?) (Coppedge *et al.* 2020: 54-55).

²⁰ The KOF Globalisation Index is available from the KOF Swiss Economic Institute's website (<https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>). The dataset was accessed on July 5 2020.

Wisler 1999). On the other hand, we believe that when the media interest in a country increases, not only will “newsworthy” protest mobilizations and violent confrontations grab attention; conventional political interactions will also likely receive an elevated chance of being reported. Our study uses the total number of non-political events in a country as a proxy for media attention in multivariate analysis. The information we used for constructing this variable comes from the 10 MIDE database. As we mentioned in the Online Appendix A, 58 of the 249 original IDEA event types are non-political events, including natural disasters, market transactions, sports contests, cultural events, and so on. We have interpreted the sum of these non-political events to reflect the degree of the media’s general attention to a country, independently of the ups and downs of political activities in the country. The natural log was taken to address the skewedness.

Population size. It is important to control for the population size of a country since a greater number of political activities will happen in large countries such as China, India, or the United States than in small countries such as Brunei or San Marino. As a measure of population size, the variable *SOC01* (population in thousands) from USAID is used. We took a natural log of the variable to address the skewness of the data. Table 1 in the article presents the basic statistics in the original scale.

D) Statistical Estimation

We use multilevel multinomial logistic regression models because our dependent variable – tactical choice – has three categories (convention, protest, and violence) and because there are two hierarchical levels as political events are nested within countries. Consider a simple model that permits different intercepts across countries:

$$Y_{ij} = \beta X_{ij} + \mu_i + v_{ij}$$

where Y refers to the dependent variable, X the independent and control variables, μ_i is country-specific intercepts, and v_{ij} represents idiosyncratic errors. The intercepts are either estimated as a series of fixed intercept parameters (“fixed effects”) or, in multilevel models like ours, treated as a normally distributed random variable (“random effects”) under the assumption that μ is uncorrelated with X ²¹. Multilevel modeling is the most viable for this study that includes the independent vari-

ables at two theoretical levels in one model: institutional regime characteristics at the level of country and repertoires at the level of political event²². It thus enables us to compare their effects on tactical choice by calculating the amount of changes in predicted probabilities, as we explain in the findings section of the article.

Three modeling issues arise and are noteworthy: sample size, unbalanced data, and missing values. First, our sample size of 169 at the second level (country) exceeds the size of 50-100 – the threshold suggested by Maas and Hox (2004) – to avoid the standard errors of the second-level variances being estimated too small²³. Second, we decided to leave our data unbalanced as they are, keeping the level 2 groups (countries) with a small number of the level 1 units (events), like Brunei, in the analysis, along with the larger ones, like the United States, with a greater number of the events. We did this because simulation results show that “despite extreme unbalance, there was no discernible effect of unbalance on the multilevel estimates or their standard errors” (Maas and Hox 2005: 88). It is also suggested that we should not set a threshold to eliminate level 2 groups with few observations (Martin *et al.* 2011). This is because, in multilevel analysis, including countries (level 2) with fewer events (level 1) – even only one event – is still better than omitting them, as it improves the estimation of the residual variance and fixed effects. Third, we use two approaches to missing data problem, listwise deletion (to remove cases that are missing data on any of the variables in our model) and multiple imputation²⁴.

In the regression output, the robust standard errors – robust to the heteroskedasticity of the errors – are reported to adjust for 156 country clusters in Model A and for 169 country clusters in Model B²⁵.

²² For each political event in the model (i.e., each first-level unit), we identify the actor of the event and obtain the familiarity scores of the actor’s country-actor category.

²³ Maas and Hox (2005: 90) find that the standard errors of the second-level variances are estimated too small when the number of groups is substantially lower than 100: “With 30 groups, the standard errors are estimated about 15% too small, resulting in a noncoverage rate of almost 8.9%, instead of 5%. With 50 groups, the noncoverage drops to about 7.3%”.

²⁴ The number of imputation or fill-ins was set at 10. In the imputation model, we included all the variables in the multilevel multinomial logistic regression model without using auxiliary variables. The variables in the imputation model were assumed to have a joint multivariate normal distribution (MVN), and Markov Chain Monte Carlo (MCMC) procedures were used. Stata’s *mi* commands were used.

²⁵ Stata (version MP 16.1)’s *vce(robust)* option in *gsem* estimation is used to compute the robust standard errors. This option gives estimates identical to the ones with the *vce(cluster)* option.

²¹ Babones (2014) suggests avoiding the use of multilevel models when this assumption is not met.

REFERENCES

- Adams A. E. and Shriver T. E. (2016), «Challenging Extractive Industries: How Political Context and Targets Influence Tactical Choice», in *Sociological Perspectives*, 59(4): 892-909.
- Almeida P. D. and Pérez Martín A. (2020), «Economic Globalization and Social Movements in Latin America», in X. Bada, L. Rivera-Sánchez (eds.), *The Oxford Handbook of the Sociology of Latin America*, Oxford University Press (Oxford Handbooks Online), Oxford.
- Annett A. (2001), «Social Fractionalization, Political Instability and the Size of Government», in *IMF Staff Papers*, 48(3): 561-592.
- Armstrong E. A. and Bernstein M. (2008), «Culture, Power, and Institutions: A Multi-Institutional Politics Approach to Social Movements», in *Sociological Theory*, 26(1): 74-99.
- Babones S. J. (2014), *Methods for Quantitative Macro-Comparative Research*, Sage, Thousand Oaks.
- Barranco J. and Wisler D. (1999), «Validity and Systematicity of Newspaper Data in Event Analysis», in *European Sociological Review*, 15(3): 301-322.
- Basedau M., Pfeiffer B. and Vüllers J. (2016), «Bad Religion? Religion, Collective Action, and the Onset of Armed Conflict in Developing Countries», in *Journal of Conflict Resolution*, 60(2): 226-255.
- Castells M. (2010), *The Power of Identity*, Wiley-Blackwell, Oxford.
- Coppedge M., Gerring J., Knutsen C. H., Lindberg S. I., Teorell J., Altman D., Bernhard M., Fish M. S., Glynn A., Hicken A., Luhrmann A., Marquardt K. L., McMann K., Paxton P., Pemstein D., Seim B., Sigman R., Skaaning S.-E., Staton J., Wilson S., Cornell A., Alizada N., Gastaldi L., Gjerløw H., Hindle G., Ilchenko N., Maxwell L., Mechkova V., Medzihorsky J., Römer J. von, Sundström A., Tzelgov E., Wang Y., Wig T. and Ziblatt D. (2020), *V-Dem [Country-Year/Country-Date] Dataset v10*.
- Eggert N. and Giugni M. (2015), «Does the Class Cleavage Still Matter? The Social Composition of Participants in Demonstrations Addressing Redistributive and Cultural Issues in Three Countries», in *International Sociology*, 30(1): 21-38.
- Ellingsen T. (2000), «Colorful Community or Ethnic Witches' Brew?», in *Journal of Conflict Resolution*, 44: 228-249.
- Fearon J. D. and Laitin D. D. (2003), «Ethnicity, Insurgency, and Civil War», in *American Political Science Review*, 97(1): 75-90.
- Finkel S., Green A., Pérez-Liñán A., Seligson M. A. and Tate C. N. (n.d.), *Cross-National Research on USAID's Democracy and Government Programs--Codebook (Phase II)*. http://www.pitt.edu/~politics/democracy/downloads/Codebook_Phase_2.pdf. Accessed 06.09.2013.
- Gygli S., Haelg F., Potrafke N. and Sturm J. E. (2019), «The KOF Globalisation Index – revisited», in *Review of International Organizations*, 14(3): 543-574.
- Jenkins J. C. and Maher T. V. (2016), «What Should We Do about Source Selection in Event Data? Challenges, Progress, and Possible Solutions», in *International Journal of Sociology*, 46(1): 42-57.
- Jenkins J. C., Taylor C. L., Abbott M., Maher T. V. and Peterson L. (2012), *The World Handbook of Political Indicators IV: An Introduction and Codebook*, Mershon Center for International Security Studies, The Ohio State University, Columbus, OH.
- Kielbowicz R. B. and Scherer C. (1986), «The Role of the Press in the Dynamics of Social Movements», in *Research in Social Movements, Conflicts and Change*, 9: 71-96.
- King G. and Lowe W. (2003), «An Automated Information Extraction Tool for International Conflict Data with Performance as Good as Human Coders: A Rare Events Evaluation Design», in *International Organization*, 57(3): 617-642.
- King G. and Lowe W. (2008), *10 Million International Dyadic Events*. <https://doi.org/10.7910/DVN/BTMQA0>, Harvard Dataverse, V5, UNF:3:dSE0bsQK2o6xXlxeaDEhcg== [fileUNF]. Accessed 14.06.2011.
- Kriesi H., Koopmans R., Duyvendak J. W. and Giugni M. G. (1995), *New Social Movements in Western Europe: A Comparative Analysis*, University of Minnesota Press, Minneapolis.
- Lorenzini J., Kriesi H., Makarov P. and Wüest B. (2022), «Protest Event Analysis: Developing a Semiautomated NLP Approach», in *American Behavioral Scientist*, 66(5): 555-577.
- Maas C. J. M. and Hox J. J. (2004), «Robustness Issues in Multilevel Regression Analysis», in *Statistica Neerlandica*, 58(2): 127-137.
- Maas C. J. M. and Hox J. J. (2005), «Sufficient Sample Sizes for Multilevel Modeling», in *Methodology*, 1(3): 86-92.
- Martin G. A. J., Nussey D. H., Wilson A. J. and Réale D. (2011), «Measuring Individual Differences in Reaction Norms in Field and Experimental Studies: A Power Analysis of Random Regression Models», in *Methods in Ecology and Evolution*, 2: 362-374.
- McCarthy J. D. and Zald M. N. (1977), «Resource Mobilization and Social Movements: A Partial Theory», in *American Journal of Sociology*, 82(6): 1212-1241.

- Medel Sierralta R. M. and Somma González N. M. (2016), «Demonstrations, Occupations or Road-blocks? Exploring the Determinants of Protest Tactics in Chile», in *Política Y Gobierno*, 23(19): 163-199.
- Minkoff D. C. (2016), «The Payoffs of Organizational Membership for Political Activism in Established Democracies», in *American Journal of Sociology*, 122(2): 425-468.
- Quaranta M. (2018), «Repertoires of Political Participation: Macroeconomic Conditions, Socioeconomic Resources, and Participation Gaps in Europe», in *International Journal of Comparative Sociology*, 59(4): 319-342.
- Roberts K. M. (2008), «The Mobilization of Opposition to Economic Liberalization», in *Annual Review of Political Science*, 11(1): 327-349.
- Staggenborg S. (1988), «The Consequences of Professionalization and Formalization in the Pro-Choice Movement», in *American Sociological Review*, 53(4): 585-605.
- Tarrow S. (2011), *Power in Movement: Social Movements and Contentious Politics*, Cambridge University Press, New York.
- Taylor V. (1996), *Rock-a-by Baby: Feminism, Self-Help and Postpartum Depression*, Routledge.
- Walker E. T., Martin A. W. and McCarthy J. D. (2008), «Confronting the State, the Corporation, and the Academy: The Influence of Institutional Targets on Social Movement Repertoires», in *American Journal of Sociology*, 114(1): 35-76.
- Walton J. and Seddon D. (1994), *Free Markets and Food Riots: The Politics of Global Adjustment*, Blackwell Publishers, Cambridge, MA.