The Logic of Revolutions: Rational Choice Perspectives

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Abstract and Keywords

However easily explicable in hindsight, revolutions are typically unforeseeable, because key determinants of individual decisions to join protests are unobservable. Coupled with the interdependence of individual choices, unobservability ensures that many revolutions occur through cascades. Surveying research on the dynamics of revolutions, this article evaluates insights into the connections between the likelihood of protests and individual freedoms. Other findings include: that network structure shapes motivations to participate in collective action; that social media facilitate mobilization and also quicken the diffusion of information through pre-established networks; that using social media as a mobilization tool poses growing personal risks as regimes learn to monitor the internet; and that a revolution may trigger other revolutions by altering individuals' expected payoffs around the world.

Keywords: revolution, protest, dictatorship, collective action, mobilization, cascade, preference falsification, social media, network, dissent

THE earliest work on revolution published under the rubric of public choice is the article "Paradox of Revolution," by Gordon Tullock (1971), one of the founding fathers of the school. Observing that revolution is a public good for its expected beneficiaries, Tullock reasoned that individuals opposed to the incumbent regime would underinvest in the activities needed to topple it. The vast majority of great historical works on revolutions were written as though society's collective gains and losses had determined the course of events. Because an individual's participation is irrelevant to the outcome, argued Tullock, only private rewards and punishments actually matter.

18.1 The Mechanics and Dynamics of Revolutions

Certain implications of Tullock's critical distinction between private and collective tradeoffs are fleshed out by James DeNardo (1985). To topple the incumbent regime, he observes, dissidents must create sufficient disruption. They can accomplish the required destabilization through two distinct means: recruiting more people into the dissident camp or engaging in anti-regime violence. Various combinations of these two destabilization methods can bring about a revolution. The challenge for dissidents is to achieve a consensus on both actions and timing. A brilliant opposition leader such as Vladimir Lenin can make all the difference by identifying a feasible strategy and then convincing a critical mass of dissidents to take the steps needed to shake the regime's foundations.

Other implications are identified by Timur Kuran in "Sparks and Prairie Fires: A Theory of Unanticipated Revolution," published in the April 1989 issue of *Public Choice*. The publication date is significant because Eastern Europe was still under (p. 346) communist rule, and practically no one had an inkling of what was about to unfold. Major revolutions have caught the world by surprise, the article observes. Even some of the most famous revolutionary leaders were among those stunned by the momentous changes that catapulted them to power. One was Lenin; another was Ayatollah Khomeini, leader of the Iranian Revolution of 1978–79. Towering observers had made the point with respect to specific revolutions. Most notably, Alexis de Tocqueville ([1856] 1971) wrote that nobody foresaw the French Revolution.

The key insight of "Sparks and Prairie Fires" is that revolutions come about through a surfacing of previously submerged discontents. Specifically, people who had been feigning approval of the incumbent regime drop their masks, openly demanding change; and long-passive opponents decide to act on their grievances. With individual switches happening in quick succession, a massive opposition forms before the regime can formulate an effective response. Motivated by a change in private individual payoffs, each individual transformation raises others' potential private gains from joining the uprising; it also lowers their costs. Collectively, the early switches thus generate a bandwagon or cascade along which public opposition feeds on itself. The upshot is a crushing repudiation of the regime. The regime collapses in the face of unprecedented public condemnation, however stable it appeared just weeks, even days earlier. Little has changed in economic conditions or in the degree of repression. For that reason alone, all parties, including foot soldiers of the revolution, are amazed to see the regime fall.

In principle, our failures to foresee revolutions could stem from the lack of an appropriate model. Kuran's claim is that the correct model of the contest between regimes and challengers predicts unpredictability. In other words, it forecasts that major political upheavals will keep generating major surprises. Later publications (Kuran 1995a, 1995b) explain that revolutions are unpredictable because of a combination of two factors. The

first is the commonness of preference falsification regarding the political status quo, a pattern rooted in the personal risks of opposing an incumbent government. And the second is that political preferences conveyed publicly—public preferences as opposed to private preferences—are interlinked; an individual's willingness to challenge the regime rises with the number of people expected to do the same. Absent preference falsification, private grievances would always get reflected in public behaviors; all shifts in the incumbent regime's popularity would become visible instantly. Absent the interdependence of preferences, minor changes in public preferences would have proportionate, and thus minor, effects on political outcomes. In combination, preference falsification and interdependent utilities allow transformations in public opinion to be both substantial and unpredictable. Jointly, they imply that discontent can burst into view suddenly and grow explosively.

In November 1989, seven months after the publication of "Sparks and Prairie Fires," throngs of East Germans breached the infamous Berlin Wall, causing East Germany's communist dictatorship to collapse. Within weeks, all six of the Soviet Union's satellites in Eastern Europe had post-communist regimes. Through an article titled "Now Out of Never" (1991), Kuran documented that the revolutions stunned their participants, victims, and observers, even the world's most powerful intelligence agencies, (p. 347) distinguished experts of Eastern Europe, and Eastern European dissenters who understood the role that preference falsification had been playing in keeping communism stable. Showing that the signs of the unfolding revolutions became obvious only after the fact, the article also reconciles the abundance of retrospective explanations of successful revolutions with the apparent lack of foresight.

Over the following years, numerous choice-theoretic books and articles have sought to provide further insights into how the Eastern European revolutions unfolded and why they were unpredicted. Karklins and Petersen (1993) emphasize that the process of revolt against a powerful regime involves two interactive dynamics: growing and increasingly frequent mass demonstrations and a simultaneous process of fragmentation and loss of confidence within the regime. For the revolt to result in regime change, they emphasize, both the masses and the regime must consist of heterogeneous agents. Heterogeneities are essential to the cascading process that characterizes observed mass uprisings. Whether potential demonstrators overcome their collective-action problem depends on two assurance games, one that they play with society as a whole and another played within their social groups. Likewise, whether the regime collapses depends on a de-assurance game that individual officials, who are alert to incentives to defect or participate in repression, play against the regime.

In a similar vein, Rubin (2014) focuses on the structure of the regime for insights into the conditions that affect the likelihood of cascades involving huge shifts in public opinion over a short period. The key variable, he observes, is the government's degree of centralization, in the sense of having the capacity to punish citizens in a wide array of contexts. The more centralized a government, the more insulated it is from small shocks to the distribution of private preferences across the population. The reason is that to

reveal one's changing sentiments is to risk many sanctions at once. By the same token, a centralized regime is relatively more susceptible to an anti-regime cascade in the face of a large shock to private preferences. Following a large shock, some citizens reach their revolutionary thresholds and publicize their discontent. Precisely because centralized rule causes widespread preference falsification, the induced shift in public opinion may incentivize further individual shifts, triggering a cascade. The gist of the study is thus that the size of the shock necessary to trigger a revolutionary cascade depends on characteristics of the governing regime.

Focusing on the East German case, Lohmann (1994) challenges Kuran's emphasis on the role that reputational considerations play in the individual choices that generate a revolution. Whereas in the Kuran model the individual's revolutionary threshold reflects both his information about the regime's performance and his expected rewards and punishments from joining the opposition, in Lohmann's model the threshold rests on his personal information alone. Accordingly, she characterizes the cascade that toppled the East German regime as an "informational cascade." As anti-regime demonstrations grew in size, individuals learned ever more about the regime's incompetence; in the process, they became progressively disillusioned and, hence, increasingly prepared to revolt. The composition of the demonstrators mattered as well. Switches in political allegiance on the part of citizens with no previous record of dissent lowered (p. 348) assessments of the regime's competence relatively more than the participation of known dissenters on the regime's watch list.

Far from ignoring individuals' reputational considerations, Goldstone (1994) treats self-identified groups as the units that decide whether to revolt against an incumbent regime. Individuals, he reasons, join groups in order to gain access to certain collective goods; and once a group has formed, its members adopt norms that ensure optimal group outcomes and prevent free riding. If revolution offers expected benefits in excess of its costs to a preexisting, self-identified information-sharing group, then each member will participate in the revolution. An individual would leave the group, and therefore not participate in revolutionary action, if the group were to stop providing worthwhile collective goods. In focusing on groups, rather than individuals, as the central decision makers, Goldstone's argument breaks from a key tenet of the public-choice literature. Though the argument is logically coherent, it has not enhanced our understanding of actual revolutions.

Numerous scholars have held that revolutions are driven by economic inequality. Seminal contributions to this tradition include Gurr (1970) and Acemoglu and Robinson (2001, 2006). Challenging this tradition, the public-choice literature on revolutions shows that relative economic deprivation is neither necessary nor sufficient for a massive shift in public opinion. First, opposition rooted in economic inequality can remain hidden indefinitely. Second, various factors other than economic inequality determine individual thresholds and their distribution. Finally, in the course of a revolutionary mobilization, individuals who are economically successful will get incentivized to join in, if only to avoid identification with the teetering regime. Reminding us that collective action issues are

more critical to mobilization than patterns of economic inequality, Apolte (2012) draws attention to the absence of uprisings in North Korea. Indeed, per capita income in North Korea is about one-twentieth the level in South Korea. And the subgroup that can expect to benefit immensely from toppling the North's dictatorship amounts to practically the entire northern population. That the North Korean regime has remained stable for decades testifies to the inadequacy of the relative deprivation theory of revolution.

The key analytic approaches to studying revolutions are compared and critiqued by Lichbach (1995). He develops a typology of solutions to the collective-action problem offered from the mid-1960s to the early 1990s. Using that typology, he then applies the solutions to the challenge of "collective dissent." Two of his conclusions stand out. First, given that the collective-action problem can be solved in some two dozen ways, it cannot pose an insurmountable hurdle for potential dissidents. Second, regimes understand that the problem of collective dissent can be overcome. Hence, they strive to intensify the coordination problem of potential rebels. Building on Lichbach's insights, Goldstone (2001) holds that revolutions may be better understood as social explosions generated by the erosion of the factors that foster regime stability. He then lists what he considers the foundation blocks of a "fourth generation" theory of revolutions.

Two particular applications of the choice-theoretic approach to revolution merit mention. The first concerns urban riots and the second, war. Focusing on the Los (p. 349) Angeles riot of 1992, DiPasquale and Glaeser (1998) set out to understand the causes of rioting. Their work provides some evidence that the opportunity cost of time and potential punishments influenced participation. It shows also that community structure mattered. The ethnic diversity of Los Angeles and the city's huge size both contributed to the riot. Examining data from Karachi between 1978 and 1996, Staniland (2010) reaches complementary conclusions. Urban insurgency is successful, he finds, when security forces are politically constrained in their use of violence, providing opportunities for sustained aggression by protestors. The second application concerns the connections between revolution and war. Walt (1996) observes that revolutions cause wars between states by altering the balance of threats between a revolutionary state and its rivals. Each state sees the other as both a potential danger and a vulnerable adversary, making war seem both necessary and attractive. Walt traces the dynamics of this argument through detailed studies of the French, Russian, and Iranian revolutions.

18.2 Regime Types

Rubin's insights on the significance of regime structure echoes a literature that highlights fundamental differences between one-party and multi-party regimes. At least through the revolutions of 1989 and the subsequent collapse of the Soviet Union, observes Kalyvas (1999), political science lacked a theory of one-party rule. This kept political scientists from understanding, on the one hand, the decay of communist regimes and, on the other hand, their breakdowns. The absence of a distinct theory of one-party rule also made retrospective accounts of these revolutions inappropriately deterministic. For instance,

the typical account of the East German revolution fails to appreciate how close, in the days before the Berlin Wall was breached, the East German Politburo came to ordering the police to shoot at demonstrators. None of the factors that are invoked as key causes of the revolution—economic failures, corruption, ideological delegitimation, Soviet reforms—guaranteed its success, or its generally peaceful nature, or the lack of overt external intervention. Retrospective accounts are helpful and necessary, Kalyvas reminds us, but they need not be deterministic. In Rubin's framework, as with revolutionary cascades generally, intrinsically minor events can have momentous consequences. So, it is fundamentally misleading to infer, from the conditions preceding the revolutions that toppled communism, that their presence would successfully predict further revolutions.

In an early contribution to the choice-theoretic literature on dictatorships, Wintrobe (1998), and in a subsequent critical survey of the literature on the mobilization of dissent in nondemocracies, Osa and Schock (2007) make observations that complement those of Kalyvas and Rubin. Political opportunities depend fundamentally on regime type, they point out, because in nondemocracies, the rights to associate, speak, and publish are severely constrained, economic opportunities depend (p. 350) on political qualifications, and the threat of repression is omnipresent. Moreover, opportunities for articulating an anti-regime discourse are very limited, and the circulation of uncensored information occurs primarily within small networks. For all these reasons, regime type must be a critical variable in theories of mobilization. For empirical validation, they argue, one must pay as much attention to failed uprisings as to successful ones. Stable regimes can provide clues as to why mobilizations failed where they might have been expected to succeed.

When a one-party regime transitions to a multi-party regime, there are implications for political stability even if the same party remains in power. Based on data from Mexico's transition from de facto one-party autocracy to multi-party autocracy in 1977, and then to multi-party democracy in 2000, Trejo (2014) shows that these transitions politicized social movements. When elections become meaningful, opposition parties have powerful incentives to contest the rules of political competition and to recruit members of social movements to help them advance their agendas. Social movements thus come to play important roles in mobilizing voters during electoral campaigns and in post-electoral mobilizations to denounce fraud. Meanwhile, in participating in electoral politics, they lose ideological focus and purity, which leads to internal divisions. The outcome is major cycles of protest, which grow more intense during and right after elections. In line with Kuran's theory, the protests lose intensity as elections become freer and fairer: changes in private preferences get reflected periodically in electoral outcomes, limiting the incentives for street protests.

The insight that in nondemocracies politics has its own rhythms has inspired many attempts to identify the factors that increase the likelihood of mobilization against autocratic regimes. Dorsch et al. (2015) reason that macroeconomic shocks rooted in rent-generating regulations may trigger mass demonstrations. Using data from a panel of autocratic countries during the period 1970–2007, they show that adverse economic

shocks do indeed increase the probability of mass protests. The authors invoke the revolutionary-cascades literature to suggest that coordination problems may prevent the initiation of protests or keep an initial protest from turning into a major challenge to the regime. Studying the Arab Spring, Brownlee et al. (2015) hold that the Arab uprisings themselves defy structural explanations, in that they occurred in a wide variety of institutional and economic settings. For that reason alone, they could not have been predicted. Although retrospective attempts have been made to group together Egypt, Tunisia, and Yemen as sharing a set of vulnerabilities, *before* they experienced revolutions no one considered them a distinct group. What structural factors do explain, and should have allowed us to predict, is that the absence of oil wealth and inherited executive authority were necessary and sufficient for a successful uprising; by the same token, the presence of either oil wealth or inherited power was sufficient for a regime to avoid an uprising or crush it violently. Oil wealth was critical because it enabled regimes to dampen dissent by buying off critical constituencies; inherited authority provided relatively greater legitimacy.

(p. 351) 18.3 Networks

The early contributors to the public-choice literature on revolutions, including Tullock, DeNardo, and Kuran, all addressed situations in which a core of dissidents had already defined their objectives. Active dissenters aimed to expand their ranks by inducing members of the hidden opposition to reveal their sentiments. Many contributions that broaden their ideas focus either on the determinants of a revolutionary core's success or on the diffusion of information through the citizenry.

Exploring the factors that determine the success of an already formed rebel group, Gates (2002) points to geography as critical to supervision, oversight, and control. In places where ethnicity is a salient marker of identity, ethnic homogeneity matters as well; it sharpens the group's identity. Finally, the rebel group's ideological positions determine its capacity to inspire hidden opponents of the regime to drop their masks and publicly support the group.

As noted earlier, Osa and Schock (2007) recognize that in oppressive regimes, the circulation of uncensored information occurs primarily in small networks. Makowsky and Rubin (2013) add that in societies under the control of a highly centralized authority, far-reaching networks are conducive to large preference-revelation cascades. The characteristics of such cascades, they add, depend on information and communication technologies that determine the means of social transmission.

Yet, as Siegel (2009) explains, effective communication need not result in greater participation. His model predicts that holding the average level of motivation to participate constant, network size alone cannot predict the level of participation within the network. Instead, one should look at the way in which connections are arranged, in tandem with the motivation levels. Accordingly, Siegel proposes a typology of network structures based on two characteristics: the clustering coefficient, which is the degree to

which individuals form clusters within the network, and the ability of behavior to spread among network members. He concludes that increasing average connectivity raises participation up to a point; further increases may be counterproductive, depending on the average level of motivation.

Building on Siegel's insights and relying on a data set of daily protests across the Middle East and North Africa in 2010-11, Steinert-Threlkeld (2017) finds that in authoritarian regimes agents peripheral to a social network may have a greater ability to initiate collective action than the network's core members. The underlying logic is that protests spread more easily when coordination among dissenters is distributed. Also, peripheral protestors may make protests diffuse farther without triggering a major reaction from the state. The result does not generalize to relatively free countries, where core members are more critical to initiating mobilization. In any case, peripheral network members generally cannot supply the leadership necessary for turning diffuse disturbances into sustainable political gains for the opposition.

(p. 352) In the literature initiated by Siegel, results rely on individual heterogeneities, including differences with respect to motivations to participate and social connections. Yin (1998) highlights the significance of heterogeneity within a variant of the Kuran model. He shows how the exact pattern of heterogeneity in participation thresholds affects the possibility of revolution. Increasing the dispersion of thresholds facilitates revolution when the regime is unpopular, but hinders it when the regime is popular. Societies with multimodal threshold distributions are less stable, but because they feature many equilibria, their revolutions are less momentous. In a related article, Leventoğlu and Metternich (2018) stress that for any group of dissidents or rebels the challenge is twofold: to win over core constituencies and to expose the state's weaknesses. Using a data set covering the countries of Africa from 1989 to 2014, they then show that demonstrations at the beginning of a conflict increase the ability of rebels to obtain concessions by motivating further anti-state behavior in a widening array of contexts.

18.4 Roles of Social Media

Since the introduction of communication platforms such as Facebook in 2004 and Twitter in 2006, social media have served as a mobilization tool for mass protests and revolts around the globe. Major mobilizations aided by social media include the Occupy movements that followed the 2008 global recession, the 2009 presidential election protests in Iran, the 2011 anti-austerity movement in Spain, the revolutionary wave of demonstrations that spread across the Arab world in 2010–11, Mexico's "Yo soy 132" pro-democracy protests during the 2012 general elections, Ukraine's Euromaidan Revolution of 2014, Hong Kong's 2014 pro-democracy protests, Turkey's Gezi Park protests of 2014, Guatemala's anti-corruption protests of 2015, the Dakota Access Pipeline protests of 2016–17 in the United States, the Russian anti-corruption protests of 2017, the Nicaraguan anti-Ortega protests of spring 2018, and the mid-2018 bread riots in Jordan.

Studies of such uprisings note that social media facilitate the mobilization of regime opponents by enhancing the speed of communication and organization, decentralizing the production of information, and enabling dissidents to express themselves relatively safely (Eltantawy and Wiest 2011; Lotan et al. 2011; Lynch 2011; Marzouki et al. 2012; Tufekci and Wilson 2012; Hussain and Howard 2013; Lang and De Sterck 2014; Aytaç et al. 2018).

Focusing on the mobilization channel, several scholars distinguish between the "Internet effect" on the ease of mobilization, which refers to the reduction in the time to convey information, and the "effect of social media platforms," which speed up the diffusion of information through pre-established networks. In exploring the latter, Zuckerman (2015) points to how social media facilitate the discovery of like-minded individuals and expose latent capacity for activism. Social media's large user base enables individuals to observe social trends on their own and with little effort. The networks consisting of individuals' contacts constitute preassembled audiences for their (p. 353) communications. In providing an organic organizational infrastructure, social media thus amplify the cascading process that Kuran (1989) describes. As such, they help to solve collective-action problems in countries where the political regime's stability rests on widespread preference falsification.

In the restricted media environment of Zine El Abidine Ben Ali's Tunisia and Hosni Mubarak's Egypt, even the Qatari media outlet Al Jazeera had difficulty operating. Under the circumstances, citizen journalism contributed substantially to the diffusion of information during key protests. Through Twitter and Facebook, protesters shared videos of government repression, raised awareness of ongoing protests, and coordinated marches. Individual activists, rather than news networks, took the lead in producing news and shaping discourses related to the protests. As Tufekci and Wilson (2012) and Lindgren (2013) report, online postings by citizen journalists were often picked up by traditional media outlets, which then informed wider audiences.

These patterns accounted for an essential characteristic of the Arab Spring: the absence of identifiable charismatic leaders willing to spearhead a revolution. The leaders of traditionally organized groups, most notably Egypt's Muslim Brotherhood, refrained from joining the protests "until victory and political change was close to a real possibility" (Hussain and Howard 2013, 62). In the revolutionary-cascade literature, which was initiated before social media, revolutionary leaders play three distinct roles: breaking the appearance of the status quo's inevitability, reshaping private preferences, and enhancing the benefits of siding publicly with the opposition (Kuran 1989, 64–65). It is taken for granted that they are capable of replacing the incumbent leaders and governing at least during a political transition. Whereas the latter role requires leaders to be prepared to take power after the incumbent's removal, the first two roles refer only to the critical task of conveying information and contributing to ignite the revolt. The citizen journalists of the Arab Spring protests fulfilled the informational and preference-molding roles of traditional leaders. During the uprisings, they enhanced the reputational benefits from participation. But, as Lynch (2011) notes, they did not supply the leadership

necessary for consolidating the achieved gains. That is why traditionally organized groups filled the power vacuums created by the ousters of Ben Ali and Mubarak. In Tunisia, the responsibilities of governing were claimed by secondary members of the old guard; and in Egypt, first by the Muslim Brotherhood and then by the military. So it is that Marzouki et al. (2012) and Moro (2015) refer to the Arab Spring revolts as "leaderless revolutions." These cases underscore the distinction between toppling an incumbent leader and changing the political system.

In the early days of social media, online communications appeared safer than those implemented through conventional media such as print and television. Zuckerman (2015) explores the relative safety of social media platforms today, with an emphasis on revolutionary action. For the most part, argues Zuckerman, social media sites are able to avoid direct government reprisals by making censorship extremely costly. Complete censoring of an opposition group's blog would disturb not only the bloggers themselves but also their followers, who are likely to be politically informed. Complete censoring of Facebook could have even more serious consequences; it would inconvenience (p. 354) politically active and inactive individuals alike, alerting larger groups to government repression and possibly turning previously indifferent segments of society into regime opponents. If only for these reasons, social media sites tend to be relatively free of government censorship. Additionally, the content produced by activists through social media websites enjoys protections against cyber attacks. They are essentially immune to distributed denial of services (DDoS) attacks, which can devastate small opposition websites. By hosting their websites within bigger sites such as Google's Blogger, activists rely on the clout of their hosts to operate safely.

Nevertheless, the use of social media as a revolutionary mobilization tool does pose risks to the mobilizers. The risks form three categories, all of which involve privacy. First, even regimes that abstain from blocking social media platforms use them as surveillance instruments; they infiltrate social media to track activists and identify their networks. Lynch (2011) argues that authoritarian regimes and their citizens are locked in a technical battle over internet use; and social media do not automatically privilege the people. Second, the main social media platforms are not strictly public spaces, as many people suppose; rather, they are privately managed public spaces. Through their rules of use, social media sites may intentionally or unintentionally hamper the ability of users to communicate politically sensitive information. Facebook's removal of the group We Are All Khaled Said offers one example (Saleh and Wahab 2011); collaborative censorship between social media platforms and the government of China offers another. Zuckerman (2015) calls such private regulation of communications "corporate intermediary censorship."

The third risk category constrains people's behaviors within a network. Acemoglu et al. (2017) liken privacy concerns to costly information leakage over the network. Individuals base their decisions to form links through social media on tradeoffs between the direct benefits and the indirect costs of information leakage. Their model predicts that, in equilibrium, networks will be based on clustered connections and homophily. Hence,

politically inactive social media users will tend to connect with other likeminded individuals. Each of these features may limit effective communication through social media networks. Thus, the use of social media itself cannot guarantee the success produced by citizen journalism during the Arab Spring.

Censorship is not the only tool that governments use to control social media; it may not even be the most effective. Governments create fake accounts with an eye toward co-opting online public opinion. King et al. (2017) present evidence from China, where in the early 2010s as many as 2 million government-directed people deliberately distorted public opinion by inserting huge numbers of pseudonymous and other deceptive writings into social media. Among the Chinese government's main goals was to prevent anti-regime mobilization through active distraction. In the same vein, Gunitsky (2015) observes that authoritarian leaders use social media to gain legitimacy, frame discourses, mobilize their supporters, and identify disparities between private and public preferences.

Evidently, social media have not been a game changer as regards revolutionary mobilization. Although they have expanded the tools of communication and also those of (p. 355) surveillance, they have not altered the relevant dynamic processes or made revolutions more predictable than in the past. The challenge for would-be revolutionaries remains the formation of a critical mass of public dissenters. And the challenge for defenders of the status quo is still to block the formation of that critical mass by punishing the issuers of threatening communications, whether on social media or traditional media. So, to call revolutions such as the overthrows of Mubarak and Ben Ali "Facebook revolutions" or "Twitter revolutions" is to exaggerate the centrality of social media to their successes.

18.5 Diffusion of Revolutions

As the Arab Spring of 2010–11, the Color Revolutions of the early 2000s, the fall of East European communism in 1989, and the "Spring of the Peoples" in 1848 all demonstrate, revolutions sometimes come in temporally close clusters. Students of social movements have tried to account for the diffusion of revolutions across countries with models involving interactions between multiple revolutionary cascades. The relevant literature, which draws insights from the literature on waves of democratization, can be organized according to how the proposed explanations account for the origin and mechanics of revolutionary cascades (Gleditsch and Ward 2006).

Early contributions to the revolutionary-cascades literature point to how uprisings in one country may trigger further uprisings by altering the political incentives and perceptions of individuals living elsewhere. In particular, a successful revolt in one country might focus attention on the vulnerabilities of some other regime, inducing its hidden opponents to publicize their own grievances. Thus, the shocks that form the critical mass of opponents necessary to start a revolution may come from protests elsewhere. By the same logic, revolutionary cascades may feed one another (Kuran 1991, 1995b, 1998). The

perceived costs of hiding discontents with the status quo could fall also through a combination of internal and external shocks.

When several countries experience a revolution in quick succession, the underlying factors could be identical, such as a fall in oil prices that damages all at once. But factors unique to each country could also have been at play. The source of discontent could have differed across countries. In fact, they could vary greatly in intensity. A country with relatively mild discontent and few public dissenters might get “revolutionized” through changes in preferences and perceptions catalyzed by successful revolutions elsewhere.

Instead of the payoffs of participants, Beissinger (2007) focuses on learning by elites. The political actors of a country will emulate the successful strategies of their external counterparts, he suggests. The demonstration effect of previous successes, he observes, allows structurally handicapped dissidents to engage in successful revolutionary action. Handicapped dissidents will adopt the successful strategies of foreign dissidents, and with every new favorable outcome, the imitation process will accelerate. Meanwhile, elites within the government will observe and attempt to improve upon the strategies of deposed regimes, mainly to avert a similar fate. The more similar the institutional (p. 356) characteristics and histories of two countries, the more feasible are such cross-border learning processes. Conversely, the more countries differ from one another along these dimensions, the fewer their interactions.

Beissinger’s account fails to capture the spread of contentious politics among fairly dissimilar countries, as between Europe and the Americas in 1848 and between hereditary and nonhereditary Arab autocracies in 2010–11. Observing that chains of revolutionary cascades may well involve largely dissimilar countries, Weyland (2009, 2012, 2014) explains how bounded rationality may lead to unjustified optimism among dissidents watching revolutions unfold somewhere else. The availability and representativeness heuristics also contribute to the spread of unrest across borders: “The dramatic downfall of a longstanding ruler makes a disproportionate impression and captivates observers’ attention in other countries; and impressions of similarity prompt much stronger emulation efforts than rational learning would counsel” (Weyland 2012, 921). Biased impressions rather than actual similarities may be at play here. Cheng and Suen (2016) offer another model of inter-state contagion that allows links between dissimilar countries. Their key assumption is that potential revolutionaries are uncertain about the possibility of achieving mass mobilization and overthrowing the regime. Observing a successful revolution elsewhere may alter their expected payoffs sufficiently to trigger a revolutionary cascade at home. Through simulations, the authors show that the rarer the revolutions, the greater the informational value of a successful revolution. This result suggests that unliked autocratic regimes will take heavier defensive measures in response to a rare revolution than one that follows several other successful eruptions.

In discussing revolutionary cascades and their diffusion, Hale (2013) calls into question the foregoing mechanisms. First, transnational cascades need not bring about actual or enduring regime changes; as a case in point, the Color Revolutions resulted in regime

cycles rather than profound transformations. Under certain definitions of revolution, therefore, these uprisings would not qualify as revolutions. Second, the author asserts that the 1989 Eastern European revolutions were all triggered by a single factor—namely, the debilitating effect of Soviet leader Gorbachev's reforms on the region's totalitarian regimes. Each country's revolutionary bandwagon originated independently, he claims, and at roughly the same time. Actual transnational cascading was crucial primarily with respect to the "hold-out communist regimes in Albania, Yugoslavia, and by some accounts the USSR," he suggests (Hale 2013, 344). But Kuran (1991, 1995b) provides evidence that early Eastern European successes triggered new revolutionary bandwagons. In the same vein, Hall (2000) documents that citizens with transnational connections spearheaded the Romanian eruption.

18.6 Challenges Ahead

As regimes change and scholars continue to be surprised by new, unpredicted revolutions, much remains to be done to enhance our understanding of the (p. 357) mechanisms and the actors that vie for regime change. The first challenge concerns the nature of the opposition. Thus far, theoretical explanations of revolution within the public-choice paradigm have assumed the existence of a core of dissidents with well-defined programmatic objectives. Recent revolutions, as the Arab Spring demonstrated starkly, betray a lack of organization on the part of dissidents. What unites protestors is not a program or ideology but simply the desire to end the status quo. It is the presence of far-reaching social networks that allows for large mobilizations to occur even in the absence of political leadership. Much work remains to be done to elucidate the conditions that bring about leaderless revolutions and also the nature of the ensuing regimes.

As shown here, few empirical studies on specific revolutions exist, partly owing to the paucity of data. Moreover, almost all existing case studies focus on successful revolutions. Valuable lessons with regard to the factors that block successful mass mobilization could be learned from studies of failed revolutions, such as Myanmar's Saffron Revolution of 2007 and Iran's Green Revolution of 2009. They may also shed light on how regimes make use of the internet in their struggles with the protestors. Indeed, one of the topics least studied from a choice-theoretic perspective is the dynamics of regime resilience. Most contributions to date take the incumbent's policy positions, if not also its strategies, as given. Very few studies have endowed incumbent regimes with the capacity to make decisions; and even fewer have treated them as agglomerations of individuals who must solve enforcement and even collective-action problems of their own. Exceptions include Sullivan (2016), which shows how governments anticipate and identify challengers' mobilization activities and employ repression to undermine such activities, and Aytaç et al. (2018), who document experimentally that in a polarized society the government may inadvertently facilitate the mobilization of opponents by responding to a demonstration too brutally.

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