

Mobilization from the Margins

Nobody is my name.

Odyssey 9.366

Collective acts of risk taking pose a puzzle to the social sciences. One minuscule contribution to a precarious collective endeavor does not improve its prospects, but it often puts the individual perpetrator at grave risk. So why do political revolutions, economic meltdowns, mass religious conversions, linguistic shifts and collective innovation adoptions happen often, and when they do occur, why are they the most unexpected? One could argue that given the scale of these social reversals, the premonitions should be clear enough. Then why do movements encompassing absolute majorities arrive as surprises to the illuminati and the powerful, not as mere predictable, perhaps governable outcomes?¹ I provide an answer in this book based on the idea of *leading from the periphery*. I argue that marginal leaders set into motion collective cascades of risk taking that are distinct from centrally generated coordinated campaigns. Keys to “surprising” and “rapid” elements of social and political uprisings are to be sought not at the centers of social attention, but in the margins, where switching to the far fetched and dangerous is more likely and less costly.

The existing solutions to the *collective action problem* stress economizing means for creating unity among the masses: central and focal forces of ideologies, repertoires of action, carefully designated incentives rewarding individual acts, as well as centers of social life, structural or ideational,

¹ See Kuran (1991).

all help to generate action in concert.² In their emphasis on central and visible themes, the more recent solutions to the collective action problem follow the early modern writings on crowds, in their interpretation of collective action as monolithic and unified. Only that now we have a more sophisticated way of discussing crowds in unison: more reasonable and verifiable than the holistic and anthropomorphic idea of crowds as the representation of some “primitive state of human mind”.³ Nevertheless, the thrust of the argument has not shifted much, still that unity, that simplifying holistic idea of the collective action in concert is central to the existing explanations. There is also a clue to the same line of reasoning in one of the folk pillars of collective action theory, which is the division between socially *central* vanguards, and following masses. The division between the vanguard and the population, has been key to theories advancing a more heterogeneous outlook of collective action among the crowds.⁴ In political communication studies, interestingly enough, the same elitist trait lives on, *opinion leaders* are the dominant gate keepers of the public opinion.⁵ All these theories share one common trait: the leaders are *central*. They start at the *center* of social, political and economic life. The actions of the vanguard in those positions strengthen the unity of masses after the preordained leaders’ cause. Early theorists of collective

² A pioneering formulation of collective action as a problem of coordination over public goods can be found in Olson (1971). Olson (1971) and Lichbach (1995) proposed a solution based on *selective incentives*, rewards for participation that can override the risks of collective action on the individual level. Hardin (1995) outlined *ideology* as a solution to the collective action problem, an economizing means of unification. Tilly (1978) introduced *repertoires of action*, routine and practiced acts of contention, such as strikes, sit ins, demonstrations, as likely vehicles of collective acts of contention despite the inherent dangers. Along the same lines, Schelling (1978) saw *focality* as the answer to the problem of coordination among many. Focal points, a central square, a canonical time or place, similar to *repertoires*, again economize on coordination. The role of public information in coordination, normalization and establishment of the status quo is also discussed in Chwe (2001).

³ See Le Bon [1895] (1960) for the origins of a holistic view of crowds as a special, singular social force, categorically apart from the combination of its individual components. In my characterization, crowds are not prior to individuals, but mass mobilization is a product of individual decisions, whose origins, unlike the existing formulations, can be the most remote and the least connected.

⁴ Marx’s early formulations of the division between *the vanguard* and the followers (Marx and Engels [1848] 1978, p. 484), gave way to many similar divisions in the following formulations, including the oft cited party-based mobilization tactics Lenin [1902] (1975).

⁵ The division between the masses and the opinion leaders is deemed to be the main feature of the modern public sphere Habermas (1991), the two-stage model of political information propagation, from opinion leaders to the masses, is one of the starting points of contemporary political communication theory. See Zaller (1992).

action, Marx included, put the well positioned vanguard at the top of a hierarchical network of influence and communication. They are to incite rebellion among clueless and unsuspecting masses. To reiterate, the separation between the two categories, in theory, still persists: central opinion leaders are the source of social information. The alternative I propose in the book prioritizes leading not from the center, but from the margins. If no conclusive clue can be found where it is expected, one has to look elsewhere. I implement a pedestrian fix to the longstanding conundrum of collective action. Simply put, dynamics of mobilization originating from marginal leaders are different from those emanating from centrally established, well connected instigators.

Mass mobilization, in contrast to institutional politics, has been the realm of a stark division between the individuality of the leaders and the malleable uniformity of the marginal masses. Instead of individuals in reified bureaucracies, unpredictable crowds, their politics ambivalent and inefficient, are one part of a dichotomy that separates well studied elite coordination from the poorly understood politics of the margins. *Leading from the periphery*, is a mobilization paradigm that has been largely ignored since the beginning of the systemic study of mass mobilization. The best known schemes of collective action situate the informed, well connected and harmonious vanguard in front of the rest. Such theories see mass uprisings as surprises,⁶ mass social conversions as haphazard, innovation adoptions as flukes.

Describing and decoding such surprises requires a formulation for leadership structure that accommodates peripheral vanguards, away from the gaze of the status quo, in addition to better known central schemes. I explore the very same possibility in order to detect dynamics that are different in their pace and reach from those originating from central, visible and seasoned leaders. The theoretical expositions and empirical evidence I outline in the following chapters portray processes that are characteristically outside the organizational narrative of the existing theories of collective action. As importantly, the idea of peripheral instigation is at odds with faceless theorizations in the form of mere power of numbers. In a network formulation it is possible to differentiate marginal actors, expect leaders in the margins and generate theoretical predictions that are now verifiable given the introduction of personalized media. The process clarifies the less explored logic of the transition phase between seemingly amorphous agitation and institutionalized politics.

⁶ Kuran (1989).

It detects familiar political patterns in unexpected places, among those actors who, unassumingly, play a crucial and defining, at times temporary, role toward historical transformations.

This is by no means a new question. Pondering the very same puzzle, was none other than Leon Trotsky, who residing in New York City at the time of the February 1917 revolt in Petrograd, the one preceding the October takeover, inquired about the leaders of the rebellion: “who led the [February] revolution? Who raised the workers to their feet? Who brought the soldiers into the streets?” His answer, expectedly, but hardly supported by much evidence, was “the Party”.⁷ That illusive division between the spontaneous outpouring of grievance in February 1917, and the organized politics of summer and fall 1917 is a showcase of a similar contrast between two modes of collective action. One is characterized with spontaneity and speed, the other with organization and ostensibly rational calculations. Institutions, ideology, information and centralization provide one resolution for the collective action problem, but do not fully answer the recurrent historical question posed above: who led the surprising waves of communal risk taking so frequent in the historical context? Rational individuals should know better.

The answer I propose is the theory and empirics of action originating from the margins. The periphery in the following chapters is not that *everything other than the opinion leaders*. It is the source of action in concert, via leadership that takes hold in small and dispersed circles of radicalism, peripheral collective action that emanates to centers of the society via a steady, at times fast strides. The key to the formulation is assuming that effective vanguardism can take hold far from the most connected, visible and “informed” areas of the social network. It is not clear if the dynamics of collective action from the margins are different from those of centralized agitations. The theory and empirics in the following chapters anticipate the effects, and are distinct from the logic of coordinated action from a central command. The contrasts between the centralized, hierarchical and well rehearsed narrative of the post-World War II social movements and the amorphous dynamics of recent uprisings all motivate similar questions. The collective memory of robust action during the Civil Rights Movement, for example, is regularly invoked in

⁷ See Trotsky (1937, ch. 8).

contrast to the amorphous leadership and decentralized organization of more recent global waves of unrest in 1989 and 2011.⁸

Mapping and decoding the dynamics of collective acts of the abrupt and decentralized kind also paves the way for harnessing their potential. The most adroit revolutionary leaders, knowingly or unwittingly, are experts in such methods. *Influence maximization* in social networks, using new technological means for advertising and information propagation is, in fact, a move in the same direction; however, there are few signs that those planning such programs think outside the conventional focus on the *center*. To influence voters, or buyers, they pay online *luminaries*, the most central and visible opinion leaders, to promote an innovation, be it political, social or technological.⁹ The idea of actualizing a network of innovation from the periphery is not as frequently tried. For doing so, one needs a total map of the social network, a technological feat that has become feasible after advances in personalized virtual networks. If we know the map of contentious social network in Paris in 1789 or in Petrograd in 1917, or an approximation of their topology, a temporal progression of transactions could reveal the direction and trajectory of mass mobilization. In the absence of personal and immediate means of recoding, it would be a futile attempt to map the footprints of the process. The same lack of empirics encourages more emphasis on highly visible leaders instead of ephemeral processes that would immediately become difficult to discern after their meteoric occurrence.

FIVE MAJOR DIFFERENCES BETWEEN CENTRALIZED COLLECTIVE ACTION AND LEADING FROM THE PERIPHERY

In the next five chapters I combine a series of theoretical demonstrations and empirical evidence to examine collective action processes that involve peripheral mobilization.

I use network parameters, including proxies for the spread and diffusion of collective action in the context of the 2011 Egyptian Revolution, the Civil War in Damascus in 2012 and a network experiment

⁸ For the former see McAdam (1982), an account of more recent “connective action” is included in Bennett and Segerberg (2013).

⁹ The theoretical foundations of influence maximization literature equate influence with centrality in the process of its formulations (Kempe et al. 2003); empirical studies of influence in virtual networks depict a more heterogeneous picture (Bakshy et al. 2011).

in collective risk taking, inter alia. The results provide evidence for the predictions of network models I develop in conjunction with the data. The idea of instigation from the periphery has significant implications in at least five distinct, but interconnected domains. First, a revision of the role of information in collective action—more communication does not always help collective action, it can at times impede it; second, it is important to study theoretical requirements for a sustainable concentration of radicalism in the social periphery on par with required conditions for generating a *critical mass*;¹⁰ third, decentralization and contagious spread of violence, in locally concentrated and globally dispersed cells, are as important for the study of civil conflict as the role of selective incentives and coordination in orchestrating collective contention, from the type traditionally assumed in studying such phenomena; fourth, the extremes of collective action cascades and total apathy are more frequent when the vanguard are set at the periphery; fifth and finally, the recognition of the existence of such network interactions leads to acknowledging action that is at times inspired by doubt instead of conviction, driven by lack of information instead of abundance of it and benefits from decentralization, not hierarchy.

To see the intuition behind the five aforementioned items note the following.

1. When the line of command is from the most connected to the rest, lack of communication disassembles the schemes of mobilization, but when severing lines of information generate circles of leadership in the periphery, empowering local leaders, then at times reducing the levels of information transactions can help to sustain growing clusters of contention. For example, adding indiscriminate communication links in a heterogeneous network, on average, only helps to reinforce the conservatism of the majority.
2. Sudden disruptions of communication media provide a testing ground for the effects of such communication links on the levels of the *dispersion* of contention. In particular, if after controlling for confounding and contributing parameters, one finds that the absence of communication caused escalation of a conflict, not the opposite, then there should exist processes other than pure

¹⁰ The idea of *critical mass* is for formulating a fully encompassing movement, in contrast, the focus of a decentralized analysis is on minimal conditions for sustenance of risk taking in small cliques in the network periphery.

coordination that abet a contentious escalation. According to the traditional collective action theory, lack of communication should suppress coordinated contention, not the opposite. In the following chapters, I have employed two stark examples of blanket communication blackout in two Middle Eastern capitals for testing the *Dispersion Hypothesis*, that disruption of media connections decentralizes coordinated conflict on the collective level, and that this decentralization exacerbates revolutionary action, not the opposite.

3. Furthermore, if the peripheral clusters of contention are capable of initiating global cascades of collective action, then the conditions under which they endure and sustain themselves become a pressing theoretical question. I formulate and examine this mathematical question, finding the minimal requirement for sustenance of collective action in dispersed decentralized cells in some basic configurations, and pose the general mathematical puzzle to be explored.
4. Next, to detect *contagion*, and to formulate its relation to lack of communication, I parse the urban conflict in Damascus in space and time. Speaking about dynamics necessitates an analysis that takes both space and time into account. In particular, I will demonstrate contrasts between the dynamics of *contagion* and *coordination* in the context of an urban conflict. The results hint at the importance of decentralized, but highly concentrated islands of contention in the urban environment, a characteristic of *small world networks*.
5. Finally using controlled experiments, I demonstrate a first step into learning about the dynamics of leading contention from the periphery of the social network. The results of the behavioral experiments show that the extremes of total action and apathy are more frequent when the vanguard are positioned in the periphery of experimental networks. In contrast, the central risk-takers are more likely to be influenced by the risk aversion of the majority.

The mere possibility of such processes hints at organization from the type that, in its emphasis on early marginal adopters and its reliance, at times, on lack of information instead of abundance of it, is distinct from formulations built on coordination and global unity. It can provide explanations for phenomena which are difficult to account for with hierarchy and coordination.

Clearly, the processes I propose do not rule out the possibility of collective cascades through strong and hierarchical binds, but my emphasis in this book is on establishing the existence of alternative modes introduced above, an introduction of *network collective action*.

In contrast, the existing theories of collective action start from the economy of coordination, they emphasize central, public, accurate and focal elements versus decentrality, local, inaccurate and peripheral. In social revolutions, innovation adoptions and financial meltdowns, the individual choice is between a safe status quo and a precarious yet appealing option that becomes increasingly agreeable on the individual level when more of the others take the same risky leap of faith.¹¹ The dynamics of such collective processes were known to the early modern writers, including Montesquieu and Locke.¹² Despite allusions to its political importance, a careful study of collective behavior, particularly in the context of crowd behavior and crowd psychology, faced empirical difficulties in the absence of a network-based theory which could dissect the crowd into its moving parts.

Despite the increasing capacity for recording and sifting through decentralized data, the modern treatment of collective action is preoccupied with its traditional emphasis on the *center*, *central leaders*, *focal points*, well known *repertoires of action* and mass *coordination* based on centralized communication or mutually held *identities*.¹³ In contrast, *spontaneity*, *local action* and *surprise*¹⁴ are given a secondary position. To see how recasting revolutions and bank runs in the regulated and familiar imagery of centralized power of numbers could be counterproductive, in the following, I review a number of existing explanations for risky collective behavior; mainly to show that what they have in common is an emphasis on the *central*, *public*, *focal* social and structural elements, while the effects of decentralization, local action and *inaccurate* information¹⁵ in the context of collective action are left unexplored. The move can be described as economizing both in theory and empirics. Focal point explanations simplify the theory, and provide explicit empirical evidence.

¹¹ In Schelling's (1978) formulation this means there are *positive externalities*.

¹² See Locke [1689] (1980, ch. 19) and Montesquieu [1721] (2008) for examples.

¹³ Each of these represent one of the existing explanation, for the emergence of collective action from inaction.

¹⁴ See Tilly (1978) for a pioneering introduction of *time* into the study of collective contentious behavior.

¹⁵ Inaccurate according to the centralized narrative. This is what Foucault calls *misinformation*, see Afary and Anderson (2005).

Before tending to the peripheral theory and empirics, a summary of existing theories is apropos.

FOCAL POINT EXPLANATIONS: CENTRAL COMMAND,
REPERTOIRES OF ACTION, COMMON IDENTITIES, PUBLIC
INFORMATION

The existing explanations for acting in concert take centralization and coordination to exist prior to the escalation of collective action. However, collective action can emerge and surge without them. Centralization, before escalation, is procedural, spatiotemporal, conventional and ideational. Coordinating on a plan of action, alignment of actors in space and time and mainstream rituals are essential to collective action's taking hold; sharing a common identity brings about acting in concert.

Collective action via coordination is the first formulation. Mancur Olson introduced an explanations for collective action based on coordinating *selective incentives*: if the benefits from joining exceed its costs, then individuals can overcome their individual risk aversion and shift from the status quo to acting for the collective cause, which is risky by nature, but provides benefits if it is successful.¹⁶ If group action is possible at all, it should happen through providing incentives to the individuals involved, and administering such provisions becomes increasingly difficult as the size of the group grows; on the other hand, the costs of acting in small groups are too high to induce action, because the costs are divided among too few, so the conclusion is that mid-sized groups are the most likely to sustain collective action based on selective incentives. The issue of coordination is key, because in Olson's framework, given the actions of all the others each individual is better off free-riding. In a group of thousands the absence of one would not count. If the others are incurring the cost, and the attainment of the collective benefit does not rely on one's own action, then why should the individual pay the costs? Coordinating actions and policing benefits ensure that cascades of free-riding do not occur, simply because there will be no action once every individual decides to free-ride.¹⁷ Nevertheless, group behavior and action in concert are recurring phenomena, even in the absence of visible coordination.

¹⁶ See Olson (1971).

¹⁷ The situation is similar to an n-person Prisoners' Dilemma.

During catastrophic episodes of communal violence, of the type seen during civil conflicts fought in close quarters, *contagion* of action in social networks operates more effectively than *coordination*. Later in the book, using a geolocated daily record of conflict locations in Damascus, I argue that progression of conflict in the city shows significant signs of spatiotemporal *contagion*, a process which operates differently from *coordination*. Given the consequences of coordinated contention in Damascus and the inherent risks of being found out, the possibility of spillovers of behavior in space and time effectively operated in parallel with better known processes of coordination.

The puzzle of action en masse in the face of individual free-riding has induced a variety of scholarly solutions, a majority of which rely on the importance of unified goals, centralized information sharing and focal actors and places already known to the actors. Thomas Schelling's notion of *focal points* is one representative solution: two individuals have to meet in New York City and have forgotten to coordinate over the location and time of their meeting on a given day. They are the most likely to converge on Grand Central Terminal at noon. *Grand Central Terminal at noon* is the focal spatiotemporal point of convergence.¹⁸ In the absence of any other information collective action shapes around the most likely hub. However, in the course of the book I argue that if the New York social network is of a specific type, talking to one's neighbors about the rendezvous can at times be as effective. The alternative solution would be to produce a meeting place and time, pass it on to a number of one's social ties (perhaps on one's social networking platform) and ask them to pass it on. Contingent on the topology of the social network, the missing friend should be contacted in a reasonable number of steps. Note the different logic: one of network-based propagation of ideas and action as opposed to the one that assumes focal points.

According to the logic of centrality and visibility, central squares become major theaters of contention in the city. This is an important point.¹⁹ Later, using a live account of events in Cairo recorded in emails and online announcements, I discuss the protests' gradual convergence on Tahrir Square in the afternoon of the first day of the protests. What I show is that planned protest locations did *not* include Tahrir at all

¹⁸ See Schelling (1960).

¹⁹ I will discuss the 2011 Egyptian Revolution in Cairo, during which Tahrir, the main square in downtown Cairo, became a focal point for contention toward the end of an 18-day standoff between protesters and Hosni Mubarak's security apparatus.

during the first day (January 25, 2011) and that Tahrir was the *least* focal during the *most* defining day of the contentions (January 28, 2011). The convergence mechanisms on the 25th, and decentralization processes on the 28th open windows into the importance of dispersed action *prior* to convergence. Furthermore, using survey data I find the vanguard of the 2011 Egyptian revolt, those who protested on the first defining day on January 25, to be as dispersed on January 25, as the overall average protester on the turning point of the Egyptian Revolution on January 28. In other words, the vanguard, in contrast to the average protester, were spread out across the urban sprawl of Cairo during the first day of the protests.

Charles Tilly introduced *repertoires of action* as rehearsed practices of contention as a solution to the dilemma of participation: street marches, sit ins and strikes become *conventions*, vehicles for action. Through their universal recognition among contentious crowds such de facto rituals can streamline resistance against authority.²⁰ The dynamics of protest *conventions* as such, are known to everybody, and everybody also knows that all others know about the technicalities of the concerted action.²¹ The only problem with this reasoning is that once a repertoire is expected, its antidote also becomes routine. Disrupting an expected act of protest is easier than facing a collective surprise act.

In addition to procedural, spatiotemporal and conventional focality, *ideational* focal points are also proposed as a solution to the coordination problem. Ideologies often turn to the rallying cry of a movement. Russell Hardin outlined the importance of a common *identity* in organizing action in concert in the absence of coordination mechanisms.²² Ideologies too, shape common identities, and in forging new alliances ease coordination between disparate elements of a collective.

All three of these explanations, focal locations, focal routines, and focal identities, implementing public spaces, conventions and ideologies, stress the importance of centralization, either in structural or in cultural domains. The importance of mutual information in organization in such context is clear. They economize on mutual information necessary for coordinating the ways to act, places to go, and times to convene. In contrast, later I argue that the very lack of centralized beacons of

²⁰ For example, see Tilly's (1978) history of *strike*, its evolution to a well rehearsed, *focal* practice in *Mobilization to Revolution*. After regularization and streamlining, the *strike* convention effectively contributed to robust protest movements across Europe.

²¹ Convention as defined by Lewis (2002).

²² Hardin (1995).

information at times can put decentralized processes of risk taking into motion. These processes are much harder to control than a predictable, centralized movement that is fully visible to the authorities from the start.

There are reasons to go beyond focal point explanations, be it ideational, spatial, conventional or coordinative. They simplify too much. They facilitate a first order understanding of action in concert and point in the direction of the most easily available empirics, but that is not enough. There are at least four considerations that demonstrate the necessity for moving beyond centrist explanations of collective action. These observations, outlined in the forthcoming chapters, cannot be explained solely based on existing formulations. Instead, they hint at processes that originate in heterogeneous social networks, and operate based on contagious processes of implicit and explicit leadership from the margins.

ACCURATE INFORMATION IS NOT ALWAYS CONDUCTIVE TO COLLECTIVE ACTION

Information facilitates coordination. Free flow of information promotes coordinated contentious action, the cognizance of that fact is one of the cornerstones of existing collective action theories. The revelation of *accurate* information about the *real* level of unrest, the *total* degree of dissatisfaction in the society and rates of conversion to contention among the population are among explanations provided for the emergence of collective action on a massive scale.²³ However, in addition to globally accessible information, such as the size of protests in the main square of Cairo or Leipzig, the information or misinformation available to members of local circles of information sharing, either face to face or virtual, is as important. In local circles, there is more flexibility in terms of the usage of information for inciting action: the members' universe of available facts is smaller, and rumors can take hold more easily. Under severe control of the public sphere the horizon of visibility is limited. When the access to information is limited, local patterns of interpersonal communication become paramount. Individuals have to rely on each other to gain news and information. Not only does the existence of alternative islands of contention become a possibility, a decentralization of these heterogeneous cells transforms the dynamics of collective action on the local level.

²³ Kuran (1989, 1995); Lohmann (1994).

Rumors in local circles, are often cited as the sources of mobilization, in the information blackouts, either intended or unintended, during bouts of contention.²⁴

Note the difference between the role of accurate information for the authorities and among the population. Unlike the concrete logic of strategic transactions, *accurate* information about the status of the regime does not fully capture the balance of power between the state and a dissatisfied population. Political legitimacy, or durability of it, for that matter, is not always a result of accurate information about the material situation of the state, but at times it is the product of perceptions not fully matched to material indices. These perceptions among individuals can perfectly be a local affair, instead of a globally shared sentiment. Rumors can simmer in the margins, incite resurrections that would be out of question had an accurate state of affair, news loyal to *reality* or the *real* dangers of rebellion, been communicated to all. The state threats and perception of power are more likely to be effective when *accurate* information is available to all.

The antidote of local information propagation processes operates on the level of the hierarchical state: accurate information about the extent and nature of contention is central to the durability of the state in the face of opposition, it is an indispensable part of prediction and maintenance of the status quo. In the following chapters, I show that the prevalence of local information is key to the transition of collective action to alternative dynamics.

POLITICAL MOBILIZATION TAKES HOLD IN CLOSE QUARTERS OF SMALL WORLD NETWORKS

Learning about the events from the social neighborhood instead of the centralized outlets, in addition to changing the perception of and propensity toward risk, irrevocably links the dynamics of contention to the structural elements of its theater. Urban environments, in particular, because of the variety and effectiveness of their landscape can induce a specific flow on the events. The advent of the Paris Commune is said to have been shaped fatefully by the Haussmannization of Paris between 1848 and 1871. While the rebellion in 1848 was based on socioeconomic divisions, the one in 1871 was influenced by the demarcations of new neighborhoods, the geography of the novel urbanization of the

²⁴ I will review some historical and recent examples in the next chapter.

previous few decades.²⁵ In the following chapters I argue that dense and interconnected neighborhoods²⁶ are susceptible to shaping *small world networks*, a web of locally dense, but globally separate, clusters of social interconnections that, as I will show with theory first, and empirics later in the book, become more susceptible to collective action in the absence of *public information*.

In a contextualized theory of collective action, local leaders, in regimes of limited information, are constricted by the nature of their access to the local population. Rumors are more likely to shape in small circles, and as the flow of information and social interactions are mostly local, contagion of contentious activity is more likely to be an effective conveyor of collective risk taking from one circle to another.²⁷

Locally clustered and globally dispersed social fabric act as the promoter of the dynamics of action from the periphery. In two chapters on civil conflict in Damascus and behavioral network experiments on collective risk taking, I argue that cascades are facilitated by such conditions, and conditioned upon occurrence, the speed of their proliferation from one locality to the neighboring areas can overwhelm the social network. The centralized dynamic cannot function well in societies that are organized among many dispersed interactive hubs. When the reinforcing power of centralized media and connective communication do not exist, local interactions are expected to activate and aggravate the contagious progression of collective contentious action. I will show that the same happened during a recent episode of the Syrian Civil War.

MARGINALS ARE MORE LIKELY TO BE EARLY ADOPTERS OF RISK

When local mobilization, as a process, is taken into consideration, the position of the vanguard in the social network becomes a part of a scientific study of revolution or any other major and rapid social transformation. The limiting assumptions of the existing theoretical formulations can be relaxed, the vanguard can be in positions other

²⁵ See Gould (1995) for a detailed description.

²⁶ Particularly those common in the Middle Eastern traditional city centers.

²⁷ See Chapter (4). Note that theories of civil conflict with an emphasis on rural contention emphasize social networks of different structure. In the urban environment, the shape of landscaping can become a proxy of control Scott (1998).

than the most visible platforms.²⁸ Marginal movers are less restricted in terms of their ability to convert their small social circle. Centrally located vanguards, on the other hand, are more constrained by the myriad sociopolitical connections that constitute their power, and cannot be as dynamic as the marginal ones.

In a celebrated work on the diffusion of innovations, Rogers attributes the effectiveness of marginal innovators to their ability to “under conform”.²⁹ Unlike centrally located and well connected leaders, they are influenced by few social connections, and tend to adopt social innovations free from the conformity inducing pressure that comes with a large following. In introducing “weak ties” as social instruments that can result in notable macrolevel social behavior, Granovetter cites Rogers’ example as evidence, and notes that weak ties of marginal leaders can transmit innovations more effectively than strong and cliquish ties, because those connected via strong social bonds are likely to already share similar traits.³⁰ Viral cascades of social conversion and commotion, on the other hand, are more likely to travel via loose social links in the boundaries among dissimilar social circles. Similar dynamics are discernible in the results of the network experiments I present later. The cascades, either of collective risk taking or full apathy, are more frequent when the risk-takers are in touch with fewer, not more neighbors. Midway outcomes are more common when risk-seekers are central to the experimental social network.

Influence is often equated with centrality in networks.³¹ Get Out The Vote (GOTV) campaigns, as well as marketing operations on social media outlets seek central figures for the sake of promoting a political or technological novelty.³² If decentralization, weak ties and marginal leaders can generate effective collective dynamics that are different from centrally initiated waves of collective conversion, then there exist methods for promoting ideas and social practices other than central operations. The first step is to confirm the existence of such processes in observational and experimental data.

²⁸ For examples of central positioning of the instigators see Gould (1993), Centola and Macy (2007) and Siegel’s (2009) formulations in three independent contexts.

²⁹ Rogers (2003).

³⁰ Granovetter (1973).

³¹ See Banerjee et al. (2015) for a recent example from influentials in the field of influence maximization.

³² For example, tweeters with the highest number of followers.

REVISITING COLLECTIVE ACTION: DECENTRALIZATION,
 CONTAGION AND SPONTANEITY AS KEYS TO MOBILIZATION
 WHEN HIERARCHY AND COORDINATION FAIL

Hierarchy, predictability and coordination underlie the institution of politics. Facing an organized suppression mechanism, a weaker collective movement is unlikely to succeed if it fully mirrors the superior streamlined structure of the state. In Tilly's words, after formulating collective action as a social process, i.e. importing a temporal element into the picture, *spontaneity* and *contagion* emerge as two components of collective action worthy of a careful examination.³³ Massive uprisings serve as showcases of *the hidden transcript*,³⁴ the aggregate language of the seemingly weak, the marginals. If the authorities were aware of these processes, they would disrupt them. The narrative of *public transcript*, the language of the powerful, on the other hand, offers an incomplete reconstruction of subversive and decentralized collective action: there are processes which surge with decentralization, lack of information, prevalence of rumors, contagion in place of coordination, when the regular and routine ways of collective contention fail.

Now, based on the imports of temporal progression, and differentiation among the agitators in terms of their location in the network, one could turn the question on its head, and ask if leadership, that starting point of power hierarchy, in the least visible and most peripheral places, induces effects that are different from the traditional formulations. Obviously, differentiation among the agents of change, radicals or the vanguard and the masses, as well as the existence of temporal dynamics, are staples of classical collective action theory. The most crucial contribution of this manuscript is allowing peripheral vanguardism. The network formulation is susceptible to a theory of decentralized contention. And the basic mathematical and empirical tools give way to fundamental questions, to some of which I have responded in the following, the remaining is future work. Unification and central coordination are replaced by dispersion and contagion. Instead of a centrally located vanguard, I have assumed peripheral leadership. The spatiotemporal data on mass collective action, from the current format, are unprecedented. Former studies had to rely on simplifying explanations.

The most defining of the revolutionary movements came as surprises to the outside world, because if they were well known and advertised

³³ *From Mobilization to Revolution* (Tilly 1978).

³⁴ See Scott (1990).

from the beginning, they could not have existed. Their separation from the conventional sources of information dissemination was a defining part of their ascendancy. That surprise is not inherent in the movement itself, but is an indicator of the nature of *knowledge* the way it is defined and obtained in centers of power and influence, away from the margins. The acts of the marginal vanguard are individually important in the initial seeding of social change, although centralization and solidification of social hierarchies that ensue from such massive acts of social reversal may have little to do with each of these peripheral leaders. Imagining contentious collective action similar to patterns of elite institutions with strong ties and hierarchical and static organization structure does not capture the dynamics of *leading from the periphery*.³⁵

There is an empirical reason for choosing the dynamics of the ephemeral over average effects. In the following chapters, I will demonstrate that the majority of the effects of interest in the data are invisible in *average*, but become evident when events are studied in their path dependent and limited spatiotemporal context.³⁶ This is no coincidence, the deviations in the margins are indecipherable in average; it is common wisdom that they do not count.³⁷ The underlying forces would work the same way irrespective of seemingly random affairs. During the early modernist period, this assumption was necessary for the existence of an emerging breed of reified governance and a matching science of society. To build a framework for inquiry on par with those of natural sciences it was necessary to search for simplifying rules in historical data. In the eyes of Hobbes and Montesquieu, contemporary with the initiators of modern natural sciences, this was a rational route to take. Only

³⁵ This change of framework also represents a departure from the two-tier classification of opinion leaders and followers in the classics of political communication Katz and Lazarsfeld (2006); Zaller (1992). I will discuss the deviation from this dichotomy in the argument over the experiments in Chapter (5).

³⁶ Multiple examples exist in the following chapters. For example, the spillover of violence between spatiotemporal neighborhoods in the Syria study in Chapter (4) disappears once one moves to a complete temporal average of occurrences in each spatial neighborhood. A similar averaging effect, but in a different context is evident in Chapter (5).

³⁷ The importance of minutiae in historical processes, small deviations with significant eventual results, has been a matter of long-lasting debates. In *The Pensées* Blaise Pascal [1670] (1995) lamented that the fate of the Roman Empire hung on the size of Cleopatra's nose. Montesquieu, a modernist pioneer, later pondered the very same question in *Considerations on the Causes of the Greatness of the Romans and Their Decline*, Montesquieu [1735] (1999), but reached a different conclusion. For him, the Romans were destined for destruction, regardless of Mark Antony's infatuation with Cleopatra and his ruinous rivalry with Julius Caesar; rationalizable undercurrents of history, not details, including Cleopatra's appearance, directed the Roman trajectory.

recently have we devised efficient tools to scientifically study the details in order “to identify the accidents, the minute deviations, the errors, the false appraisals, and the faulty calculations that gave birth to these things that continue to exist and have value for us”.³⁸ Now we have the data to detect such aberrations: peripheral network effects are not necessarily lost in the economizing narratives of grand histories. An approach that is obsessed with static institutionalized data is incapable of capturing ephemeral dynamics, hence the detailed microlevel methods implemented in the following chapters. On the methodological level, the network dynamics of politics on the large scale becomes significant when small entities grow in importance and cascade effects and collective behavior are taken out of the closet of “irrational”, “contingent” and “epiphenomenal”. What was disparaged as base, primitive and uncouth is now scrutable, giving political voice to elements outside the realm of the self-aggrandizing manipulating elite. Similarly, clues to the origins of a sudden disruption of the status quo are unlikely to be found in the mainstream and closely edited narrative of *the public transcript*, hence the frequent commentary on its surprising and contingent elements. The roots of rupture are recorded as *transgressions* of the editorial, not dissimilar to the remnants of a clandestine mischief captured in the background of a scenic image. The focus on the microlevel details of interactions, conflictual events and experimental dynamics ensures that averaging mechanism of summarizing narratives does not hide crucial details. The naiveté of uncouth data is necessary.³⁹

Now that there exist network data apt for testing theories of decentralized collective action, one could go beyond the more expected and the most visible. The project in the following chapters is built around the same idea. On multiple occasions I show that the effects of interest, are not discernible in average, but are the most clear in *instances* of the data, for example invisible in the temporal average, but existent in the day to day dynamics (Chapter (4)), or absent in cross-sectional averages, but visible in the disaggregate data based on each singular occurrence of the experimental session (Chapter (5)).

My emphasis on decentralization, contagion and periphery does not mean that collective action cannot be orchestrated from the center. However, the dynamics would be different, and that difference has

³⁸ Michel Foucault (1984, p. 81).

³⁹ Nevertheless, while both institution and economy are fixed in the duration of rapid history, they influence the *onset* of rebellion.

not been discerned and singled out in the existing scholarship. In the following, I propose the possibility, formulate a few models for the logic of *leading from the periphery* and put the implications to the test using empirics from collective contention, in the form of urban protests, civil wars and laboratory experiments of collective risk taking. Confirming the existence of such processes, particularly in localized *small world networks*, hints at new possibilities of social organization, ones that we have been impervious to, because the easiest solutions to the conundrum of governance favor the most visible and the most powerful.⁴⁰

OUTLINE OF THE BOOK: DESIGN AND MAIN FINDINGS

The book presents theory and evidence on the dynamics of mobilization that originates from the margins, not the center. Such *network collective action* spreads in ways distinct from centralized coordinated collective action. An array of empirical evidence and a parsimonious theoretical formulation establish the existence and import of *leading from the periphery*.

The inquiry starts from a curiosity: during the 2011 Egyptian Revolution, the data on the location of major collective action incidents through the 18 days of contention point at the highest geographical spread of conflict in Cairo during a complete blackout of communications. In Chapter (2), I present the detailed account of mobilization on January 25, 2011 in Cairo, according to a series of emails sent out to multiple hundreds by the leadership of the April 6 Youth Movement. These emails, some just minutes apart, portray the microlevel convergence of contentious flows from many corners of Cairo into its focal theater, Tahrir on the 25th. The defining question for the study, and the book, is the importance of the centralization of contention for the eventual

⁴⁰ One could interpret the findings in different dimensions. From the network science perspective, centrality is not necessarily equivalent to influence. From the social psychology perspective, crowd behavior is not necessarily uncouth and unrefined. From the collective action theory perspective, coordination is not all that there is to mobilization, contagion and diffusion are also of utmost importance. From the political communication perspective, the distinction between opinion leaders and the periphery, and the two-level structure of influence are not always plausible. From the mechanism design perspective, influence can be applied from the margins, not necessarily from the center. From the spatial analysis and urban design perspective, decentralization and the spatial composition of the actors are important. From the media theory perspective, at times lack of information is as important for incitement to action as the abundance of it.

success of the movement. Descriptive evidence points at an increase in the dispersion, i.e. geographical distribution of the contention, simultaneous with a complete blackout, put in place by the government with major unintended consequences. If coordination would have been the sole process in place, a media blackout should have stifled the opposition, as the regime intended. The results were the opposite. Mapping the dynamics of the protest became possible after fielding a survey of more than 700 Cairo residents. The respondents were asked if they participated in protests in distinct phases of the 18-day rebellion, and if they did, they were asked about their going to Tahrir. The results provided a dynamic picture of centralization of protesters in Tahrir. There are two noteworthy results, both reflected in Figure (1.1): first, as implied by the descriptive data, protesters reported the smallest rates of participation in Tahrir during the media blackout. This is an effect, which I argue, cannot be solely attributed to the actions of the government. The second piece of corroborating evidence is revealing of distinctive, and overlooked, dynamics of *leading from the periphery*: the *vanguard*, those who protested during the first phase of the protests, before the 28th, were more dispersed than the typical protester, most importantly during the first phase of the protests, as well as during the blackout. In other words, the vanguard of the Egyptian Revolution were more likely *not* to be in Tahrir on the first days of protests. That high dispersion, compared to the average protester who naturally was conditioned to converge on Tahrir, was instrumental to the success of the rebellion. The same decentralization during the blackout on the 28th exacerbated the revolutionary unrest.

An online appendix includes the reproductions of more than 60 hourly emails sent by the April 6 Youth Movement leadership during the early days of the 2011 Egyptian Revolution. The survey dataset and the full text of respondents' remarks on the effects of the blackout, as well as the scans of more than 500 print surveys conducted in Cairo, are also included in the online appendix.

Chapter (3) embarks at formulating a theoretical foundation for *leading from the periphery* and a network collective action theory which can describe the emanation of collective action from leaders situated at the periphery of the social network. Central to the possibility of *leading from the periphery*, are the conditions under which cells of contention take hold and persist in the margins. Instead of *critical mass*, for generating an all encompassing wave of contention, I explore the conditions for sustenance of sleeper cells, which can persist under threshold dynamics of collective

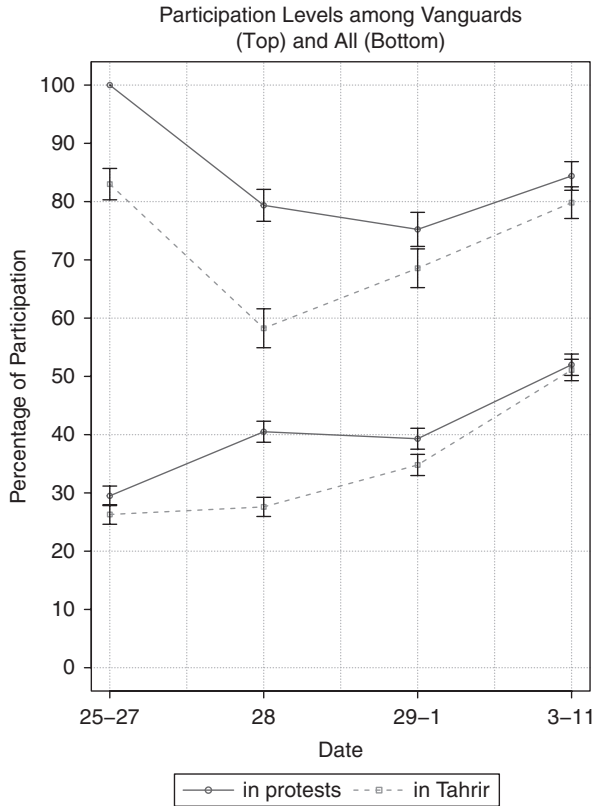


FIGURE 1.1. Participation levels among all survey respondents, $N = 740$, bottom figure, and among the vanguard, $N = 218$, defined as those participating in the first phase of the protests. Note two main points: first, the protesters are away from Tahrir in the largest proportions on the most defining day of the protests, January 28. More importantly, the vanguard reported dispersed protest activity, away from Tahrir during the first phase of the protests, on par with their dispersion on the 28th.

action. For any given graph of connections, this puzzle translates to a fundamental mathematical question itself.⁴¹ I will show that under some conditions, the existence of such cells is connected to the smallest subset of a network in which all members have more neighbors inside the subset as

⁴¹ Related to a group of fundamental mathematical puzzles called *isoperimetric* problems.

opposed to outside of it. I call this smallest set a *minimal core*. Clandestine collective action in the periphery is the most likely to persist in such cells.

The importance of these marginal pockets of risk taking at the margins of the society lies in their singular response to modes of communication in a world of dispersed contention. I will show that, with threshold dynamics of collective action and a minimally demanding learning dynamics, these networks become more sustainable in the absence of communication, not its abundance. For example, in Figure (1.2), the size of the *minimal core* increases when the reach of communication is increased. In other words, for sustaining islands of action among a majority of risk averse individuals, curtailing communication is beneficial. Increasing connectivity can diminish network collective action, and islands of action in the social networks wither away when connectivity increases.

In Chapter (3) I also outline a model of network collective action based on public–private signaling. The signaling model shows that the value of *public* information lies in the structure of the relevant social network, and that removal of public signal, depending on the network structure, can be beneficial to collective action in specific network configurations, an important example of which is the *small world network*. The value of social information depends on the structure of the underlying social network. This fact, and the role of *small world networks* in *leading from the periphery* becomes clear after a detailed study of an urban conflict in Chapter (4).

Chapter (4) contains further evidence on the importance of contagion during blackout and escalation via decentralization of conflict in the absence of communication media. In this chapter, I present a GIS (Geographic Information System) analysis of the Syrian Civil War in Damascus using a detailed daily dataset of conflict locations in the city of Damascus proper. Similar to the Egyptian case, I show that the dispersion of the urban conflict increased during the blackout. Figure (1.3) shows a daily profile of the normalized dispersion of the conflict, defined as the sum of pairwise distances between each possible pair of conflict locations, divided by the total number of the incidents. The dispersion parameter peaks during the blackout, and the findings are robust to a number of dispersion parameter definitions. Using a number of control variables, I argue that this effect cannot be attributed solely to the regime's activities. In the search for an explanation, I define and measure *contagion* processes in Damascus in the last nine months of year 2012, and show that contagion was effectively activated during the blackout. The spatial

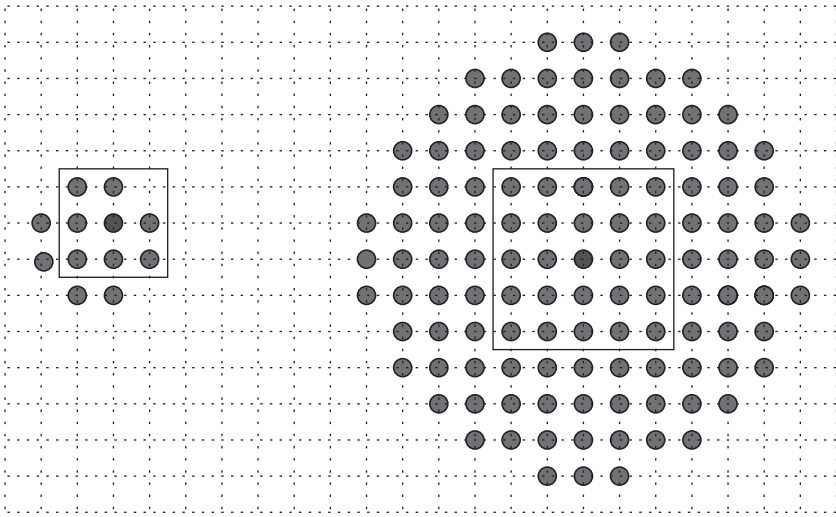


FIGURE 1.2. A comparison between the size of *minimal core* for $m = 2$ dimensional grids, radius of connectivity $n = 1$ (left), and $n = 2$ (right). The nodes reachable from a given central node are demarcated with an overlay box. Increasing radius of connectivity by one unit increases the size of *minimal core* to 121.

and temporal profile of the conflict in Damascus portrays locally dense, but globally dispersed clusters of violence. This topology, interestingly enough, is the structure of a *small world network*. In Chapter (3) I showed that the *absence* of public signals in such network structures escalates the contentious process, it does not impede it. The blackout itself, exacerbates the localization process, producing a positive feedback channel, fanning the flames of localized and contagious collective action in the absence of communication media. It is a self-reinforcing cycle of decentralization and escalation, set into motion by a complete communication blackout.

The online appendix for Chapter (4) contains the comprehensive GIS dataset itself.

Two elements of mass collective action – the rapid spread of risk taking and the “surprise element” inherent in their appearance-require explanation, particularly because both are key to a successful movement, as they are the mirror opposite of the state’s controlling structure. Furthermore, conscious emulating of a centralized hierarchy does not

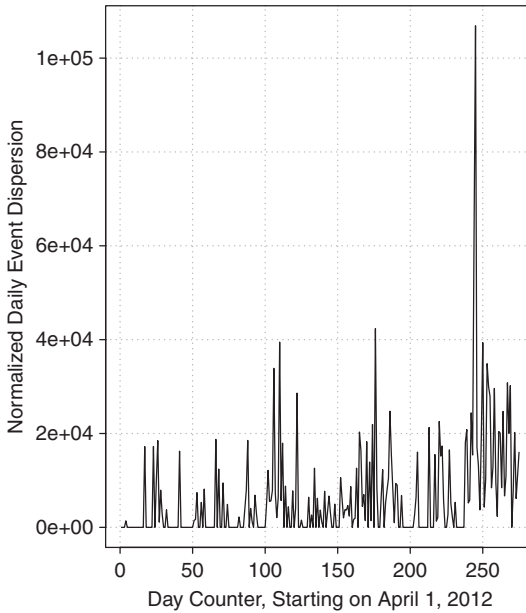


FIGURE 1.3. Normalized dispersion of conflict based on the sum of pairwise distances between all conflictual incidents per day in Damascus and its suburbs. The visible peak corresponds to the duration of the two-day blackout.

assist mobilization from the periphery. To examine the dynamics of collective action from the periphery, Chapter (5) outlines the results of a series of network experiments in which the vanguard, i.e. those more prone to adopt risk taking before the others, are deliberately installed in different locations of experimental social networks. The subjects engage in a game of collective risk taking, which is a lottery that, similar to a revolution, rewards when a majority of the social network take part in taking risk, and punishes when they fail to do so. The status quo is always the safe, but hardly rewarding choice. The results of three network treatments, outlined in Chapter (5), show that collective waves of risk taking or, in contrast, complete apathy, are more frequent when the vanguard are located in the periphery, as opposed to the center, and when the cascades do happen, they happen more quickly. Central leaders are swamped by the risk aversion of the majority, to many of whom they are linked. Peripheral instigators, on the other hand, do not bear the pressure of a large following, and their influence is amplified in small circles, before spreading to more central locations in the network.

Figure (1.4) depicts the dynamics of risk taking in experimental sessions resulting in *cascades*. The sum rates of risk taking, and apathy, in the peripheral assignment, i.e. the extremes, are more likely to happen when leaders are positioned in the periphery of the social network.⁴²

This is a result that would be invisible if the simple total average levels of risk taking were compared between peripheral and central assignments of the vanguard. However, the disaggregate results reveal the often ignored dynamics of *leading from the periphery*. The details of

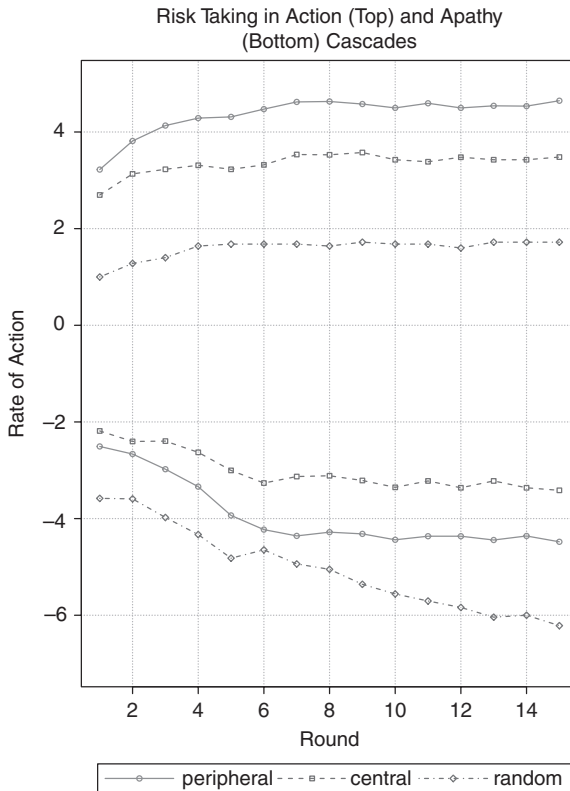


FIGURE 1.4. Sum of action rates in all sessions in cascade status for action (top) and apathy (bottom) cascades. Note that peripheral assignment generates higher rates of action and apathy in cascades. The results are more extreme when the vanguard are assigned to the periphery. Total number of subjects in the experiment $N = 720$.

⁴² A random positioning of the vanguard would cause the smallest rates of collective action.

the experimental results, along with illustration of the collective action dynamics in an experimental setup are included in Chapter (5).

Finally, Chapter (6) examines the implications of the findings. If the peripheral vanguard are capable of embarking on singular cascades of collective action, then that possibility can redefine the way political power is imagined. Hierarchy, control and predictability are the heart of the modernist state and society, and the application of power relies on a centralized institutional structure. The results of the distinct processes I outline, on the other hand, give a glimpse of alternative modes of social organization, whose potential is not as directly governable as the traditional modes of mobilization.⁴³

⁴³ The online appendix includes the pointers to the Cairo survey dataset at <https://goo.gl/S9Jm3e>, Damascus GIS dataset at <https://goo.gl/ZCjY9b>, network experiments of collective action dataset at <https://goo.gl/FQ6PEo>, as well as scans of mobilizational emails during the 2011 Egyptian Revolution at <https://goo.gl/EERpPC>, scans of hundreds of survey interviews in Cairo at <https://goo.gl/7keQ9O>, and network visualizations pertaining to all experimental sessions at <https://goo.gl/Dr7mW6>. The author maintains the online appendix on his personal webpage at <https://navidhassanpour.com/>.