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Social Networks



Tolerable disagreements: Collective action capacity & shape of coalitions

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ABSTRACT

This paper examines collective action (CA) capacity and shape of coalitions. By applying temporal exponential random graph models on original datasets of Ottoman and French contenders, it finds that coalitions form both for strategic and ideological reasons; but strategically unified coalitions are more likely to take CA. Also, coalition shape depends on the type of disagreements among partners. Ideological polarization induces side taking; actors build ideologically oriented disconnected blocs. Absent ideological disagreements, strategically likeminded actors form cliques. Otherwise, umbrella coalitions emerge. This study ocers a novel theory to explain the kind of coalitions that are more likely to take CA.

Introduction

Coalitions are desirable for mitigating collective action (CA) problems and improving social movement success. But they require a certain level of agreement on principles and values to be effective (Van Dyke and McCammon, 2010, xviii). Such agreement enables partners to act together towards the shared goal by sidelining other issues where opinions divide. While some coalitions form and function effectively despite disagreements (Ghaziani and Baldassarri, 2011), others fragment, or fail to form. Why do some coalitions tolerate disagreements but not others? Is there a relationship between the shape of coalition and disagreements?

This paper proposes a novel theory of "tolerable disagreements" to explain the effect of disagreements on coalition shape and capacity to change the regime by drawing on network analysis and game theory. Social movements scholars theorize agreements with respect to shared ideology, collective identity, or shared frames (Snow, 2006; Van Dyke and McCammon, 2010; Pfaff, 1996). However, in some cases, cooperation fails despite these commonalities. In Interwar Europe, doctrinal differences inhibited socialist, communist and anarcho-syndicalist parties from joining forces against fascism (Berman, 2006). In other cases, coalitions function without shared ideology, such as the Islamist-leftwing coalition in 1979 Iran (Behrooz, 2012). Thus, which agreements trigger cooperation and which disagreements do not obstruct coalition formation need further explanation. This paper addresses this gap in the literature.

I ground my tolerable disagreements argument on a crucial

difference between ideologies and strategies. Ideologies are beliefs, goals, and principles prescribing the ideal form of some entity or environment (Snow, 2006). Updating ideologies requires disillusionment with underlying beliefs. Therefore, ideological preferences are rigid in the short run. Strategies are a set of tactics chosen from a repertoire, which is as "a limited set of routines that are learned, shared, and acted out through a relatively deliberate process of choice" (Tilly, 1995, 42). Strategies are flexible in the short run, because actors set and revise them according to environmental conditions, perceptions of appropriateness, experiences, and learning without necessarily reconsidering their worldviews. As I will argue, this difference in short-term flexibility generates behavioral differences and affects coalition shape.

I argue that coalitions form for both strategic and ideological reasons. Yet, partners are more likely to change the regime if they streamline their strategies and sideline or resolve their ideological disagreements than if they align their ideologies but diverge on strategies. Also, coalition shape depends on disagreement type and level. Ideologies being rigid in the short run, polarization makes actors choose sides; ideologically-oriented *disconnected blocs* become more likely— e.g., the Cold War. Absent polarization, actors come together based on strategic or ideological affinities. When they have few disagreements, they form *tight coalitions*. At medium agreement levels, actors form an *umbrella coalition*,¹ wherein cooperation is broad loose at the community level and may deepen within factions, e.g., the Occupy Movement (Calhoun, 2013). At low agreement levels, few coalitions form; a state of disunity is expected.

The argument is tested on two novel datasets of antiestablishment

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¹ Umbrella organization is an association of institutions, which coordinates activities of its members and protects their shared interests ("Umbrella Organization," 2021)

groups to authoritarian governments in Bourbon France (1814–1830) and the Ottoman Empire (OE) (1876-1908) to which statistical modeling and network analysis are applied. These datasets were compiled doing 32-month research on historiographical and primary sources. I identified 146 coalitions and collected information on their profile, interests, financing, and contentious activities. I coded this information on a yearly basis to keep track of the number of active groups and preference changes. The periods under examination occupy a prominent place in French and Ottoman histories. In 1876, the OE adopted constitutional monarchy for the first time. This was also one of the first constitutional transitions in a non-Western and/or Muslim society. In 1814, monarchy returned to France after Napoleonic Wars. The 1830 Revolution that overthrew this monarchy spread the revolutionary wave across Europe. The French and Ottoman regimes transitioned to constitutionalism (1814 and 1876), turned absolutist (1825 and 1877), and collapsed by a revolution (1830 and 1908). Beyond displaying similar trajectories, these regimes varied in the identity of challengers, type of bargains, and the nature of domestic and international environmental pressures. While the Ottoman regime was challenged by constitutionalist and secessionist groups, who bargained over statehood and nationhood, among others, the French regime was challenged by parliamentary groups and their grassroots, who bargained over regime type. These ideological, political, and environmental discrepancies ensure that, if similar dynamics for coalition shapes and CA are observed, they do not result from similar temporal, geographical, or ideological factors. The Ottoman and French cases pose an interesting puzzle to social movement studies, which expects collective identity and/or shared ideology to precipitate CA (Gould, 1995; Ansell, 2001; White, 2008). French and Ottoman contenders remained disunited for decades against authoritarianism despite identitarian and ideological affinities even though revolutionary situations provide strong interests for cooperation against the regime and high costs for doing otherwise—since their disunity advantages the government (Donno, 2013).

I study the role of strategic and ideological agreements on coalition dynamics using network analysis. Scholars conceptualize coalitions as networks and analyze their evolution using network properties-e.g., degree or brokerage (Ansell, 2001; White, 2008; Diani and McAdam, 2003). Some utilize homophily to investigate the role of common objectives, principles, and ideologies on organized group behavior (Heaney, 2014; Baldassarri and Diani, 2007). Building on these studies, I operationalize ideological and strategic agreements through homophily. I measure the role of disagreements on coalition formation with temporal exponential random graph models (TERGM). ERGMs are useful to analyze network evolution (Heaney, 2014; Simpson, 2015) and robust to missing links in small networks (Krause et al., 2020). They are convenient for analyzing my historical datasets, which, as I discuss in the data section, contain more information on large groups due to the dearth of sources on smaller groups. To explain coalition shape, I refer to modularity, centralization, transitivity, mean degree, average path length, and eigenvector centrality. These metrics capture the number of communities, the level of cohesion within these communities (Diani, 2015), concentration of ties, the ease of access from one node another, and groups occupying important positions on the network (Himelboim et al., 2017) and are suitable for identifying the abovementioned network configurations.

The paper is structured as follows: First, I discuss the role of French and Ottoman coalitions on the Revolutions of 1908 and 1830. s, I survey coalition formation and CA theories and introduce the tolerable disagreements theory. Next, I describe the data and research design. After presenting and discussing the findings, I conclude.

Ottoman and French coalitions and the Revolutions of 1908 and 1830

How did the formation of political coalitions shape the demise of the Bourbon and Ottoman absolutisms in the early 19th and 20th centuries? This section outlines findings of my case studies on Bourbon France and the OE—for detailed information see the Supplementary File.

Organized groups struggled against antiauthoritarianisms during the 1880s and 1908 in the OE and (1814-1830) in France. Ottoman contenders came from bureaucratic, clerical, and student circles and had different visions for the future regime and society. Brought together by their anti-regime sentiments, they worked through the Committee of the Union and Progress (CUP) (1889). Despite differences, contenders stuck together against shared threat, and the CUP rapidly expanded across the Empire (Hanioğlu, 2001). In 1897, the Sultan coopted the then leader of the CUP; and the organization closed. While many abandoned the cause, the unrelenting constitutionalists persevered in Geneva and Paris. Until 1900, the latter collaborated but did not unite. In 1900, the Sultan's nephew Sabahaddin embraced the constitutionalist cause and set out to reunite the movement. He organized the 1902 Opposition Congress, which exposed severe disagreements between two major groups-the Minority led by old CUP members and the Majority led by Sabahaddin. From 1902–1905, the gap between the Minority and the Majority widened, while small groups gravitated between the two. In 1905, the Committee of Progress and Union (CPU) formed and rapidly attracted like-minded constitutionalists. In 1907, the CPU absorbed the Minority and a constitutionalist society of military officers. The revolutionary process began on July 3, 1908. What started as a local uprising in Macedonia escalated into a revolt. The CPU seized control in mid-July and demanded the restoration of constitutionalism; the Sultan gave in on July 24.

In its early years, the Bourbon Monarchy was polarized along the radicals' (the republicans, fédérés, and bonapartists) uprisings and the royalist counterviolence (aka the White Terror) (Alexander, 2004). The royalist cabinet, which was more absolutist than the King, condoned royalist crimes and repressed the radicals. To shortcut criticism by center-right parliamentarians (i.e., the doctrinaires and the constitutionnels), they made it a habit to govern through decrees. In 1816, polarization subsided when the constitutionnels assumed power. In 1817, a novel heterogeneous movement, the leftwing, emerged, reclaiming universal suffrage and constitutional checks. The leftwing initially cooperated with the center-right on suffrage extension. Yet, this coalition collapsed, because the center-right cabinet would not abolish repressive measures against the radicals and leftwing supporters. To independently run elections, the center-left decided to get organized in the countryside and won electoral victories. The leftwing's popularity had a setback in 1820 with the spreading rumor that the latter was plotting a coup. The royalists and center-right joined forces to pass repressive laws against the leftwing, which triggered violent clashes between royalists and radical leftwing grassroots. Whereupon the center-left broke with radical factions that insisted on using violent strategies. Meanwhile, the royalist block shattered with the moderate royalists' (defection) renunciation of absolutism.

The succession of an absolutist king, Charles X, to the throne in 1824 marked a turning point. Charles X recentralized administration and extended the Church's competences to project power in provinces through the clerical network. These policies instigated widespread discontent, which focalized on the person of the monarch. In cities, secularist contestations erupted. In parliament, the center right, the defection, and the leftwing formed a secularization camp. The economic downturn of 1828 did but amplify discontent; urban and rural revolts broke out. Against this backdrop, the crisis of March 1830 set the revolution in motion. Following the Parliament's vote of no confidence to the King's minister, Charles X dissolved the Parliament. On July 25, the King dissolved the next Parliament as well, and disenfranchised middle classes. To keep the situation under control, he censored the press. Uprisings started the next day. Despite the King's violent measures, protests escalated. The center-left took the leadership of protesters. On the 29th, the King was dethroned, and the center-left proclaimed the July Monarchy.

Thus, the French and Ottoman regimes belonged to different eras and

geographies and featured different actors and different bargains in different environments. Had two regimes from the same era and/or geography been chosen, similar outcomes could have been attributed to similar contextual pressures or "snowballing" (Huntington, 1991). Geographical, contextual, and ideological differences across the French and Ottoman cases ensure that if similar coalition shapes and CA dynamics are observed, they cannot be attributed to similar ideology or contextual factors.

Table 1 summarizes strategic and ideological issues and the array of

Table 1

Bargains	&	Preferences.	
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	Issues	Preferences	Explanation
	State type	The nature of the state to build after transition	"constitutional monarchy"; "independent nation state" "Ottomanism
	Society type	The nature of society to build after transition	(multicultural imperial society)"; "non- assimilationist Turkish nationalism"; "assimilationist Turkish nationalism"; "other nationalism"
	Means of regime change	How to overthrow the government?	"Coup"; "revolution"; "non-revolutionary change"; "terrorist attacks"
Ottoman Empire	Foreign assistance	Seek foreign government support for transition?	"Yes, toreign assistance is this overthrowing the government"; "No, foreign governments work to disintegrate the Empire" "we are non-secular us
	Secularization	Use religious propaganda to mobilize people?	we mobilize people through religion"; "we are secularists but mobilize people through religion"; "we are secularists and mobilize people by appealing to constitutionalism, rights, and freedoms"
	Cooperation with secessionists	Cooperate with secessionist groups to overthrow the sultans government?	"cooperation with secessionists is unacceptable"; "we can overthrow of the government more easily if you cooperate with secessionists"
	Executive – legislative balance	Distribution of power between the executive and legislative	"strong legislative (e.g., parliamentary absolutism)"; "strong executive (absolutism or Bonapartism)", "checks and balances" "order comes first":
	Authoritarian- libertarian axis	Order or liberties comes first?	"liberties comes first"; "equally important, but if you must choose order first"
France	Suffrage	Whom to enfranchise?	"universal suffrage"; "upper classes"; "Upper and middle classes"
	Secularization	Preserve the churches privileges?	"Abolish the church has privileges"; "the church keeps its privileges"
	Centralization	More autonomy to local administration?	"yes, we must decentralize"; "No, centralize administration is better"
	Violence	Use violence is an electoral strategy?	"Yes, if it helps to assume power"; "No, it is unaccentable"

preferences. Preferences are nonidentical but overlap on certain issues. Describing various tactics to overthrow authoritarianism, means of regime change, foreign assistance, secularization, cooperation with secessionists in the OE and violence in France qualify as strategic preferences. In contrast, state and society type in the OE, and suffrage, secularization, the executive-legislative balance, and the authoritarian-libertarian axis in France relate to the kind of state, society, and governance that contenders desire. Therefore, they are ideological issues. Let us see how existing theories account for how actors coordinate on overlapping preferences by sidelining remaining disagreements.

Coalition formation & CA

What can we learn from the French and Ottoman cases that can improve our theories? Coalition is a form of CA defined as combined and coordinated efforts for a shared goal (della Porta and Tarrow, 2005). In revolutionary contexts, coalition building requires "coordinating constantly changing combinations of interests, organization, mobilization and opportunity, when interests vary from quite individual to nearly universal" (Tilly, 1978, 11). How do actors coordinate preferences and take CA against the regime despite disagreements in the fluidity of revolutionary contexts?

In the social movements literature, coalitions form and take CA for tactical and ideational reasons. Tactically, coalitions are beneficial for pooling resources or countering threat (Van Dyke, 2003). Threat propels coalition formation and CA by diminishing participation costs and elevating costs of inaction against opponent (Van Dyke, 2003). Disagreements are temporarily sidelined in this process. Once threat subsides, however, disagreements resurface, and cooperation risks failing (Ansell, 2001, 10). Thus, threat is a powerful propeller but requires perpetuation. Furthermore, what constitutes impending threat to one is not necessarily impending to another. Leftwing parties in Interwar Europe, for instance, considered their ideological differences too big to surmount despite the fascism threat. Thus, tactical factors are associated with coalition building and CA; but we must explain how they trump existing disagreements and induce CA. To this end, we must unpack perceptions and priorities.

Ideationally, collective identity and shared ideology posit a shared understanding of "us," which, by emphasizing shared meanings and ideals at the expense of disagreements, forges solidarity (Gould, 1995) and propels coalition formation and CA (Ansell, 2001; White, 2008). However, these factors do not guarantee CA if interpretations of "us" compete, since such competition may fracture solidarity (Ansell, 2001). To reinforce solidarity, movements may sharpen the dualism between "us" and "them." This strategy works if undecided sympathizers choose the movement; otherwise, the movement splinters (Osa, 2003). Consequently, the unifying effect of shared identity and ideology is sensitive to individuals' priorities. Therefore, although they are associated with CA, shared identity and ideology are not sufficient for CA. The case of the Islamist-leftwing coalition suggests that they are not necessary for CA either. Perceptions and priorities must be considered to comprehend how identitarian and ideological affinities trump other disagreements and trigger CA. The tolerable disagreements theory elaborates on this mechanism. Before proceeding, let me note that, from here on, I will analyze identity under ideology, because, as (Gould, 1995) argues, they are intertwined. Collective identity-e.g., national identity-may trigger social conflict, because ideologies-e.g., nationalism- interpret the world and assign individuals into identity categories (Gould, 1995, 15).

Tolerable disagreements

Coalition building in revolutionary contexts poses a coordination problem with multiple constantly changing preferences (Tilly, 1978). One way to overcome coordination problems is to improve preference compatibility through updating. Some mechanisms to trigger preference updates in game theory are environmental transformations and learning (Kagel and Roth, 2016). However, because individuals update at different times and in different rates—since they differently value information, risks, and uncertainty (Kagel and Roth, 2016)— CA may not immediately unfold following environmental transformations, or if it does, it only involves those who have updated their preferences.

Are all preferences equally easy to update? Building on social movements research, I suggest that ideological preferences are more rigid than strategic preferences in the short run. Since ideology is a belief and value system, updating ideological preferences requires disillusionment, which occurs over time. In contrast, strategies posit action plans and are shaped according to environmental conditions, experiences, and learning. They are thus flexible in the short run. For instance, iterated prisoners' dilemma experiments show that players, who pick different strategies at the onset, shift to tit-for-tat after seeing this strategy outperform others—actors come to this realization at different times (Axelrod and Dawkins, 2006).

If strategies are flexible and actors are rational, why do they conflict in the first place? In bounded rationality theory, what actors see fit depends on the information they possess, their cognitive biases, trust, and experiences (Kahneman, 2013). In the Ottoman case, the Majority and the Minority divided on seeking foreign assistance against authoritarianism. The latter contended: "Can we not see that the smallest privilege extended to foreign governments later appeared as a prerogative? If Europe came to rescue us, she would try to separate the Armenians and Macedonians from us" (Hanioğlu, 2001, 12, 34). Hence, strategic interests conflict not because actors are irrational, but because they reach different conclusions with information and resources at their disposal. The Majority was led by the Sultan's nephew, whose wealth and prestige enabled negotiating with foreign governments. Having neither, the Minority focused on mobilizing people. These groups never cooperated (Hanioğlu, 2001), which exemplifies how divisive strategic conflicts can be.

Defining strategies as a set of tactics and ideologies as belief systems builds on existing social movements research (Gould, 1995; Snow, 2006; Van Dyke and McCammon, 2010). Distinguishing the two allows capturing strategic divisions among the ideologically like-minded and ideological divides among the strategically like-minded. For example, the fundamentalist ISIS, the nationalist ETA, and the Black Liberation Army employ terrorist strategies to reach different ideals. Conversely, revisionist and orthodox Marxists of the late 19th century argued for different strategies --revolution vs. reform-- to bring socialism (Berman, 2006). For some, strategic issues are ideological (Beck, 2009) and discourse serves as a strategic instrument (Snow et al., 2004). From this perspective, whether communism should come via revolution or reform is an ideological question, and antiauthoritarian discourse is a strategy. Assuming strategies as action plans and ideologies as worldviews, this debate was initially strategic but became ideological after revisionists espoused democracy (Berman, 2006). An ontological discussion of ideologies and strategies goes beyond the purposes of this paper. The scholarship lacks a consensus.

Coalition formation & regime change

Following social movements research, I expect coalitions to form based on ideological and strategic affinity as well as tactical concerns like threat. As for regime change, its timing is unpredictable, because it depends on contextual contingencies and opportunity structures (McAdam et al., 2001). However, given an opportune context, we can evaluate whether some coalition is more likely to change the regime than another. When providing such explanation, it is important to specify how ideological and strategic affinities outweigh existing disagreements rather than simply state that affinities exist. To this end, I turn to the discounting mechanism from economics. Discounting means to assign a lower value to an option whose reward will be later received (Frederick and O'Donoghue, 2003). When faced with options whose rewards are collected at different times, individuals pick the one that brings an earlier reward and *discount* others. Empirically, individuals vary in what and how much they discount (Urminsky and Zauberman, 2015).

In revolutionary contexts, discounting some preference *X* means to deprioritize the reward associated with *X* to obtain an earlier reward associated with another preference. For instance, the Iranian leftwing might have surmised that communism could come earlier if authoritarianism were ousted than if it survived. This calculation, which must have rendered collaboration with the Islamists appealing, requires having discounted ideological differences. Once these were discounted, shared anti-regime interests propelled CA. Thus, discounting some disagreement allows collaboration with those who think differently.

While both strategic and ideological disagreements can get discounted, I expect groups to be more likely to overthrow the regime if they discount ideological disagreements than if they discount strategic disagreements. Because strategies posit action plans, those who harmonize their strategies are more likely to overthrow the regime (insofar as they have no ideological conflicts) than the ideologically likeminded who disagree on ways to achieve shared ideals. Hence the first hypothesis:

H1. Coalitions are more likely to change the regime if members streamline their strategies and settle or discount ideological disagreements than if they align their ideologies but diverge on strategies.

Coalition shape & disagreement type

Disagreement types affect coalition shape at the community level, because ideologies, unlike strategies, entail strong identification with certain values and ideal (Ansell, 2001; Gould, 1995). Polarization reinforcing this identification, actors take sides. As polarization brings the ideologically like-minded together, *disconnected blocs* form—e.g., the Cold War period. Absent polarization, actors build coalitions based on ideological or strategic affinities. In practice, these affinities are unlikely to bring everyone together. But many are connected to some groups; a few isolates remain. Thus, a single large component emerges.

At the local level, coalition shape under both disconnected blocs and single components depends on disagreement levels. At low disagreement levels, *tight coalitions* (featuring dense connections) are likely. At moderate disagreement levels, like-minded actors unite around some shared ideology or strategy. Although not everyone is interconnected, some like-minded can deepen cooperation within factions. Thus emerges an *umbrella coalition*— broad loose cooperation within the wider community of groups, which deepens within factions. At high disagreement levels, few coalitions form in non-polarized environments; a state of disunity follows. In polarized environments with high disagreement levels, denser connections are expected, because actors stick together against threat. Loosely connected umbrella coalitions are expected. Fig. 1 summarizes the coalition shape hypothesis.

In practice, these structures rarely exist in pure forms. Even under severe polarization, brokers may bridge disconnected components. Also, coalitions change shape as agreement levels and environmental conditions transform, e.g., tight coalition may secede from some umbrella coalition.

Operationalization

I test these hypotheses using network analysis. Following previous work, I operationalize coalition as a network, a group of pairwise coalition ties that work together as community, and CA capacity as cohesion (Diani, 2015, 86; Osa, 2003; Baldassarri and Diani, 2007). In highly cohesive networks, members are mutually engaged (Diani and McAdam, 2003, 307), and opportunities for coordinated and sustained activity increase (Osa, 2003, 24). Previous work have operationalized cohesion as the number and strength of interorganizational ties through centralization (Osa, 2003; Diani, 2015), where centralization "measures the



Fig. 1. The Shape Argument.

dispersion of centrality scores relative to the most central score in the network" (Sinclair, 2011, 30). According to this definition, star networks -the most centralized networks- are most conducive to CA. In such networks, mobilization pressure uniquely emanates from the center. However, because interests, tactics, and organizations constantly change in revolutionary situations (Tilly, 1978), leaders may find their decisions contested by followers. If the authority or its decision(s) is contested, pressure from the center can fall short to mobilize followers, since the latter always find ways to not comply (e.g., shirking responsibilities) (Scott, 1987). Compliance with collective decisions becomes more likely if followers or their peers agree with the decision (Estrada and Vargas-Estrada, 2013). In other words, followers comply because they support the decision (compliance through agreement) or the majority complies (peer pressure). From this perspective, CA can be harder in star networks than in fully connected networks that maximize mobilization pressure on single nodes. To capture both dimensions of compliance, I propose operationalizing the strength of ties as agreement level. High agreement levels signal compliance through agreement and/or strong peer pressure.

Turning to the shape hypotheses, I capture disconnected blocks using modularity. This metric is convenient to detect whether the graph is disconnected, for it represents the number of edges falling within groups minus the expected number in an equivalent network with edges placed at random (Newman, 2010, 7.69). High modularity implies dense connections between vertices within modules but sparse connections between vertices within different modules (Grindrod and Higham, 2018). High and moderate modularity levels suggest disconnected blocs, whereas low modularity indicates one (loosely or densely connected) component.

Tight coalitions are operationalized as communities with dense connections. In densely connected networks, most members and their neighbors are interconnected, and members can easily access to another member. I capture these properties using high mean degree, high transitivity, and low average path length (APL)—the minimum number of edges one would have to traverse to get from one vertex to another (Newman, 2010, 6.10.1). In disunity, where connections are sparse, mean degree and transitivity must be low, and APL must be high.

Remember that umbrella coalitions are defined as broad loose cooperation that deepens within factions. Umbrella coalitions come in different shapes. Connections can be loose throughout or display a core of interconnected hubs to whom peripheral actors are attached. Cores emerge when some actors deepen cooperation, but others do not follow suit (which yields moderate agreement levels at the community level). I identify cores using eigenvector centrality (EC), which measures centrality by giving each node a score proportional to the sum of the scores of its neighbors. High EC means that the node has many neighbors or important neighbors, or both (Newman, 2010, 7.2). Thus, umbrella coalitions with an interconnected core feature a few high EC groups, while the rest has low EC. Concomitantly, high EC groups have higher mean degree than others, which yields moderate mean degree and moderate transitivity for the whole community of groups. APL must be low because high EC members bridge peripheral members. I operationalize umbrella coalitions without a core with low or moderate transitivity, mediocre mean degree, low or moderate APL, and the absence of high EC nodes. Fig. 3 recaps network structures and their indicators.

Data

I compiled two original datasets of contender groups to authoritarian regimes in France (1814–1830) and the OE (1876–1908) conducting historiographical and archival research. I identified 146 coalitions, whose identity, interests, financing, and contentious behavior I coded on a yearly basis to keep track of active groups and interest updates (For more information on coding see Supplementary File).

Combining historiographical and archival sources, I established constitutional changes, relevant contenders, their preferences and activities, issues, and the character of authoritarianisms. Both sources

present shortcomings. Primary sources can be biased, since contenders (un)intentionally misrepresent or withhold certain facts to avoid repression or justify themselves. Historiographical work can also be biased if historians follow some agenda. Finally, some bias is just inevitable, because documentation is insufficient on small groups, or because some groups deliberately destroy their documents. My strategy to reduce bias, except the inevitable kind, consisted of crosschecking information in primary documents against historiographical studies and vice versa and looking up missing information-in other sources. Also, I hired an assistant to code my sources using the rules I had used; we reached 90 % intercoder reliability score. Regardless, my datasets contain less information on smaller groups. It is impossible to determine how much data on small groups is missing, since there is no documentation. However, datasets contain all small, medium, and large organized groups documented by historians of the examined periods. Missing data do not systematically distort my results, because exponential random graph models (ERGMs) "lead to acceptable biases in descriptive statistics and model parameters even under large amounts of missing data" (Huitsing et al., 2012, 99). Even in small networks, where missing observations may be disconcerting (Smith and Moody, 2013), simple ERGMs successfully handle missing data (Huitsing et al., 2012).

Following (Brams, 1994), I coded preferences based on contenders' self-declared positions in primary and secondary documents. Deriving preferences from observed behavior would have caused endogeneity. Also, behavior does not mirror preferences, because actors may behave against their best interests. I took self-proclaimed interests as a proxy for motivations, which is a reasonable assumption, since groups express their motivations to mobilize people. To give an example of what do preferences look like, of the two major Ottoman groups to emerge in 1902, the Majority endorsed secularism, Ottomanism, and cooperation with secessionists and foreign governments to overthrow authoritarianism, whereas the Minority, also secularist, supported Turkish nationalism and opposed cooperation with actors that worked for imperial disintegration.

Research design

The unit of analysis is group defined as organized contenders who advocate for a distinct preference set and purposefully work to overthrow the government. Each group is represented as a node. Groups (nodes) represent parliamentary factions and grassroots organizations in the French case and secessionist and constitutionalist groups in the Ottoman case.² Other coding rules are explained in the next section.

The **dependent variable** is coalition between a pair of groups, which cooperate on legal and illegal activities to overthrow authoritarianism. Indicators include cooperation on sponsoring some bill, generating verbal/written anti-regime propaganda—including the monarchy and his policies, plotting coups, and mobilizing citizens through secret meetings, protests, and uprisings.

These diverse types of cooperation are included in one network, and ties representing coalitions are not weighted by the number of contentious activities or their level of riskiness. If groups attempt a coup, generate propaganda, and rally protests in some year, these activities form one tie. The reason is twofold. First, there is no theoretical or empirical ground to suggest that some high-risk activity (e.g., coup) has greater impacts than some low-risk activity (e.g., propaganda). Rather, a failed high-risk activity (e.g., coup attempt) may reinforce the regime's legitimacy—e.g., the 2016 coup attempt against the Erdogan government in Turkey, whereas some lower-risk activity may undermine the regime's legitimacy (e.g., the Gezi protests against the Erdogan government). Also, under a repressive regime, what normally are low-risk activities can be highly risky. For instance, Ottoman contenders in exile published periodicals to criticize authoritarianism. Those who could not afford to publish their own periodicals wrote in other contenders' periodicals. In an environment, where the sultan's spies were trying to infiltrate into the movement, coauthorship signaled trust. Finally, networks are undirected since cooperation is reciprocal. Failed attempts do not cancel successful cases of cooperation in the same year. Ties survive if groups take contentious activity the following year and break otherwise.

I define what we call "coalition" in daily speaking a group of ties between pairs of actors that work together as a community. I identify such communities using the "walktrap" algorithm. This algorithm more precisely detects communities than its alternatives (Yang et al., 2016). In walktrap, at each time step, a walker randomly moves to another node in the neighborhood. This algorithm grounds on random walk but outperforms it by avoiding getting trapped in dense communities, thus providing better accuracies and smaller standard deviations in small networks (Yang et al., 2016, 5). However, I also tested the theory using betweenness, leading eigenvector, fast greedy, and label propagation algorithms. As shown in Supplementary File, algorithms produced the same output in many cases. For where, they differed, I calculated agreement scores. Yet, differences between agreement scores were not significant enough to alter predictions.

Independent variables

I investigate the role of disagreement types and levels on coalition shape and groups' ability to change the regime. Disagreement refers to conflicting strategic or ideological interests, while agreement suggests compatibility. Remember that ideology denotes a belief and value system, whereas strategy is a set of tactics chosen from a repertoire. As mentioned earlier, state and society type in the OE, and the authoritarian-libertarian axis, the executive-legislative balance, suffrage, secularization, and centralization in France are ideological issues, while the rest are strategic issues, because they define different tactics to change the regime.

France: I operationalized the executive-legislative balance as a continuous variable, where (-1) denoted executive predominance (absolutism or empire), (0) represented checks and balances, and (1) meant parliamentary predominance (tyranny of the parliament). This scale was appropriate, because power distribution was zero-sum and historiographical sources evaluated groups' positions relative to one another (e.g., ... preferred weaker/stronger parliament/cabinet than...). On the authoritarian-libertarian axis, historians also provided ordinal measurements for group positions (e.g., the doctrinaires were more committed to liberties than the constitutionnels). I projected them onto the authoritarian-libertarian axis-a most used scale for party politics, which varied between (-1), indicating order comes first, and (1), indicating liberties come first. I operationalized suffrage extension as a categorical variable, because preferences were "upper classes," "middle classes," and "universal." Secularization was operationalized as a dummy, which was "secular" for opponents of clerical involvement in politics and "theocratic" otherwise. I constructed a dummy for centralization, which was "1" for decentralization supporters and "0" otherwise.

OE: I operationalized state type as a categorical variable. This variable was coded "nation state" if groups demanded national independence, and "constitutional imperial state" if they supported imperial integrity under a liberalized regime. I built another categorical variable for society type. Society type does not mirror state type, because a) secessionist groups may support different nationalism, b) those to

² French ministers and affiliated parliamentary factions were coded as one actor, because they acted in unison. Grassroots organizations were coded as separate actors because they had different preferences than parliamentary groups. In the Ottoman case, I coded factions as separate actors if they held distinct preference sets even if they belonged to the same organization. Also, if a contender founded more than one organization with the same purpose and interests, I coded the latter as one group. I coded organizations as different actors only if their purpose and interests changed.

support the same nationalism do not necessarily seek secession, and c) constitutionalists identify themselves with different society types (Hanioğlu, 2001). I coded groups as "ottomanists" if they supported imperial multicultural society, "Turkish nationalist" if they supported Turkish nationalism, "Turkist" if they were assimilationist nationalists, and "secessionist" if they endorsed another nationalism. I operationalized religious propaganda also as a categorical variable called "secularization." I coded groups "secularist" if they desired secularism and generated secularist propaganda, "nonsecularist" if they were nonsecularist and generated religious propaganda, and "tactical nonsecularist" if they were secularist and generated religious propaganda. Regime change was operationalized also as a categorical variable, because preferences were "nonrevolutionary change," "coup," "revolution" (if they approved of revolution but not terrorist attacks to weaken the central government), and "terrorism" (if they approved both violent strategies). The "foreign assistance" and "cooperation with secessionists" issues were operationalized as dummies. Each was coded "Yes" if groups favored these strategies, and "No" otherwise. Importantly, only the constitutionalists discussed whether to cooperate with the secessionists; secessionists were not coded on this issue. Finally, missing data was coded (9).

Testing the coalition shape argument

I test the shape argument in two steps. First, I calculate intracoalition agreement levels using the following procedure.³ On each strategic or ideological issue, I calculate the percentage of support for the dominant view. For example, if, in a coalition of three, preferences on issue *X* were, say, *A*, *A*, and *F*, *A* predominates. Support for A equals 2 (number of A supporters) over 3 (coalition size). For each coalition, I average agreement levels for ideological and strategic issues. Higher agreement levels suggest stronger peer pressure and higher probability of compliance through agreement. Second, I calculate the modularity, centralization, transitivity, APL, mean degree, and EC of all coalitions and use the theory to predict coalition structure, and compare them to observed networks.

Testing the CA argument

H1 suggests that groups are more likely to overthrow the regime if they streamline their strategies and settle or discount their ideological disagreements than if they harmonize their ideologies but diverge on strategies. I test this argument at two levels. At the coalition level, I employ the intra-coalition agreement levels derived from the abovementioned procedure to sort the coalitions that score high on strategies and/or ideologies and compare among them. Controlling for opportunity structures, finding that the coalitions to overthrow the government display strategic convergence, when rival coalitions (especially the ideologically aligned and strategically divergent ones) do not, enhances the argument that strategically aligned coalitions are more likely to change the regime than the ideologically aligned coalitions that diverge on strategies. As to whether strategically aligned coalitions must also be ideologically aligned, I look at the ideological agreement score of the regime changing coalitions. A score of 1 indicates that ideological disagreements are settled. A score less than 1 suggests that ideological convergence is unnecessary and is indicative of discounting --since some member, who disagrees with the majority's stance, acts along, meaning that disagreement does not hinder CA. That said, intracoalition agreement levels are imperfect indicators. At the same agreement level, one may regard some disagreement too fundamental to discount, whereas another may think it otherwise. Experiments and

interviews would have brought further evidence to discounting (Wakaizumi et al., 2019; van den Bos and McClure, 2013); but these methods are inapplicable to historical datasets. Therefore, I additionally test discounting with TERGMs. TERGMs bring statistical evidence to which disagreements *do not* hinder tie formation and which agreements foster cooperation.

TERGMs are temporal ERGMs, which are stochastic models that treat possible ties among nodes of a network as random variables. ERGMs predict the likelihood of observing a network displaying some desired network structure (e.g., degree distribution) by randomizing other characteristics. ERGMs treat a network as a single observation drawn from a complex multivariate distribution and calculate the probability of seeing networks resembling to the one we study within the set of possible network configurations (Desmarais et al., 2012, 292-96). TERGMs use the same strategy but assume that some network observed at time t depends on previous networks. TERGMs simulate a Markov chain that constructs a random network at each step and choses present configuration over an existing one if the former is more probable than the latter. The process is repeated until a pattern emerges within networks in the chain. We then conclude that most simulated networks look like the one observed (Hunter et al., 2008, 16). The probability of observing some network (N) is defined as

$$P(N,\theta) = \frac{w(\mathbf{N})}{\sum_{i=1}^{m} w(N^i)}$$

w(N) is a shorthand for $exp(\theta'h(N))$, where θ is the vector of parameters to be estimated and h(N) the vector of network statistic. $exp\{\theta'h(N)\}$ weighs the network statistic by θ , while the denominator normalizes the probability distribution (Hanneke and Xing, 2007). The interpretation of parameters resembles regression: "A positive (negative) parameter value means we are likely to observe networks with larger (smaller) values of that statistic (e.g., number of triangles) than would be expected if the network were drawn at random from a uniform distribution of networks" (Desmarais et al., 2012, 293).

I operationalize the compatibility of (strategic or ideological) preferences using homophily. Statistical significance for homophily communicates that some agreement, say, X, foster cooperation. If the coefficient for homophily along X is statistically significant, we infer that tie formation is non-random; agreement on X affects coalitional behavior. Positive significant coefficients suggest that more ties form than would have been if ties formed randomly given all other terms in the model. Negative coefficients indicate fewer tie formations (given all other terms in the model), hence openness to work with those who think differently. If the homophily coefficient for X is statistically insignificant, we infer that ties form regardless of whether actors agree on X, or disagreement over X does not hinder cooperation. This finding is indicative of discounting, since if actors discount some issue to obtain an earlier reward, whether preferences overlap in the short run no longer matters. That said, a coefficient can also be statistically insignificant because the issue is irrelevant or there is insufficient data. The latter is an inherent limitation of historical datasets as discussed in the Data section. Issue irrelevance, on the other hand, is unlikely, since issues were established based on documented discussions and actors' public statements. If some issue were irrelevant, actors would be unlikely to mention or discuss it given diverse pressures of a revolutionary context. I tested categorical variables with the nodematch function and continuous variables with absdiff in the statnet package (Handcock et al., 2003). Remember that coordination becomes easier if updates make preferences more compatible. TERGMs take this into account since preferences were coded on a yearly basis.

Control variables

Regime transition cannot be solely explained by agreement levels.

³ A similar but more technical method has been used to calculate agreement within randomly constructed social networks (Estrada and Vargas-Estrada, 2013).

Opportunity structure and resources matter as well (McAdam et al., 2001). I control for these factors in two ways. In the French case, location affected contenders' ability to communicate and collaborate. Parliamentary factions could meet regularly, whereas distance taxed communication among grassroots organizations. "Venue of operation" controls for environmental differences and was coded "parliament" if actors were parliamentary factions and "grassroots" otherwise. In the Ottoman case, groups in exile faced financial constraints. Some sought financing by another contender. Others took money from the Sultan promising to abandon the cause without necessarily honoring the agreement. "Financing from the Sultan" conveys the number of times the Sultan financed some group. "Financing from another contender" tracks the number of times some contender was sponsored by another. Both were operationalized as numeric node attributes using the nodecov function. A statistically significant decrease (increase) in degree means that financing from ... hinders (promotes) cooperation.

I controlled for changes in the opportunity structure through periodization. For France, I separately examined the reigns of Louis XVIII (1814–1824) and Charles X, because under Louis XVIII discontent targeted the royalists, whereas under Charles X, absolutism canalized discontent onto the monarch. Hence, absolutism amplified protest activity and changed costs of revolution and inaction. I divided the Ottoman case into (1895–1902) and (1903–1908). The Young Turks had emerged in 1889; but the analysis begins with 1895 due to the lack of systematic information on their activities before 1895 (Hanioğlu, 2001). 1902 constituted a turning point, in part because the Opposition Congress spawned newer fractions and novel interests and made coordination harder (Hanioğlu, 2001), and in part independence demands and foreign invasions escalated thereafter and altered costs of CA.

While TERGMs control for opportunity structure and resources by control variables and periodization, they cannot establish which groups are more likely to overthrow the regime given the conditions described in H1. To this end, I compare agreement levels of the coalitions that overthrew French and Ottoman authoritarianisms to other coalitions. This comparison reports whether strategic coordination is necessary but strategic coordination is not.

Finally, three more control variables were added in each case. "Out" controls whether some group is active in a year. (1) means a group is inactive and cannot form a tie; (0) indicates otherwise. Out was operationalized as a node attribute using the *nodecov* function. Second, groups learn and only renew effective partnerships. The variable "past cooperation" accounts for past interactions, which I operationalized as an edge constraint (including all past years) using the *edgecov* function. Finally, "clustering" controls for the propensity to partner with a partner's partner. High clustering indicates hierarchical network at the local level, while low clustering suggests that nodes form relations rather freely. I measure clustering using the *gwesp* function (fixed to zero).

Findings

Disagreements & coalition shape

This section examines the relationship between disagreement types and levels and coalition shape using the indicators in Table 2. Tables 3 and 4 report values of these indicators and results of community detection. Figs. 2 and 3 represent observed coalitions.

Ottoman empire

The constitutionalists worked through four major organizations during (1895–1908): The CUP, the Minority, the Majority, and the CPU. During (1895–1897), contenders united around anti-regime sentiments despite their differences (Hanioğlu, 2001), which leads us to expect a single component at the graph level. Table 3 reports medium modularity scores and average agreement levels for all communities except #1—which must be a tight coalition. In accordance, Fig. 2 displays single components. At the subgraph level, all communities except #1

Table 2

Agreement type, coalition shape, & indicators.

	Disagreement type	Coalition shape	Indicators
	deological polarization	Disconnected blocks	Medium/high modularity
Community (graph) level	No polarization	One (loosely or densely connected) component	Low modularity
	Disagreement type	Coalition shape	Indicators
	low	Tight coalition	High mean degree, low APL*, high transitivity
local	medium	Umbrella coalitions	EC** groups, low APL, higher transitivity, moderate mean degree
(subgraph) level			(if no core) no high EC groups, low/ moderate APL, lower
			transitivity, moderate mean degree
	high	Disunity	Low mean degree, low transitivity, higher APL

*EC: eigenvector centrality.

**APL: average path length.

and 7 feature high EC groups, which suggest umbrella coalitions with a core. 1895 features the highest transitivity and APL, and the lowest centralization, implying that connections tighten in one part of the network. In effect, according to Fig. 2, the network would be disconnected without the AR—MM bridge. #1, displaying high agreement levels, has a potential to become a clique, whereas #2 rests on the shoulders of the high EC groups. After 1895, agreement levels improve—though they never match those of #1. Therefore, we should see tighter connections within umbrella coalitions in these two years, which is corroborated by diminishing ALP and increase in centralization, mean degree, and transitivity.

During (1898-1901), the constitutionalists collaborate but do not unite, and there is no polarization although groups discuss the effectiveness of revolutionary vs. non-revolutionary strategies (Hanioğlu, 2001). If true, we should observe mediocre agreement levels, indicating single components. In accordance, Table 3 reports low modularity, and Fig. 2 displays single components. Furthermore, agreement levels score low for all communities except #12, which attains high ideological agreement but suffers strategic divides. All communities except #8 and 11 feature high EC groups. These findings indicate that most communities are umbrella coalitions with a core. Fig. 2 affirms these expectations. Networks in 1898 have higher mean degree and transitivity, and lower APL, which suggest denser connections. Noticeably, when Prince Sabahaddin (PS) joins the movement in 1900 and sets out to unite the constitutionalists, he stands out as a high EC group. However, he loses his central position in 1901, which signals as early as in 1901 that his unification attempts are unlikely to succeed.

After 1902, the movement splinters, and polarization along foreign assistance and cooperation with secessionist organizations forecloses possible collaboration between the Minority and Majority until 1905 (Hanioğlu, 2001). Given polarization, the theory expects disconnected blocs. This expectation proves accurate only for 1905, when modularity is moderate. Fig. 2 displays disconnected blocs for 1905, and single components for 1902, 1903, and 1904. Yet, these latter networks have higher APL than in 1905, even though mean degrees and centralization are close for all years, while high EC groups exist for all communities in this period. These findings suggest that cooperation in 1902, 1903, and 1904 deepens around the core but stays loose at the graph level. In these years, the Majority (#14, 1, 19) and the Minority (#15, 18, 20) would be

 Table 3

 Network structure of Ottoman coalitions.

Year	APL**	Mean degree	Centralization	Transitivity	Modularity	High Eigenvector centrality groups	Communities	Ideological agreement level	Strategic agreement level
1895	2.24	3.17	0.26	0.57	0.25	AC. IT. PCT*. FM	(1) MM, TSC*, CUP ulema, ulema	0.88	0.79
						AR, CUP_Istanbul	(2) CUP_Istanbul, AC, IT, AR, FM, PCT*, ARF*, SDHP*	0.50	0.62
1896	1.75	5.25	0.52	0.49	0.13	CUP Istanbul, IT	(3) CUP Istanbul, CUP ulema, MM, TSC*, AR, PCT*, SDHP*, TH, ulema, ARF*	0.70	0.63
						PCT*, CUP activists	(4) CUP activists, IT, AC, FM	0.63	0.63
1897	1.72	4.13	0.39	0.44	0.13	CUP Istanbul, AC, FM	(5) CUP ulema, AC, CUP activists, FM, TSC*, muvazene, IT	0.71	0.68
						CUP activists, IT, CUP ulema	(6) CUP Istanbul, MM, ulema	0.83	0.67
							(7) AR, TH, CUP Berlin	1.00	0.67
1898	1.77	4.33	0.42	0.61	0.12	CUP Istanbul, IT, AC	(8) TH, ARF*, IMRO*	0.50	0.58
						FM, CUP Berlin, AR	(9) IT, muvazene, Bashkim*, AC, FM, CUP ulema, CUP activists, AR, CUP Berlin	0.78	0.67
1899	1.84	3.2	0.31	0.48	0.09	CUP activists, TH, CUP Berlin, IT, AR	(10) CUP activists, TH, IT, CUP Berlin, SDHP*, CUP ulema, Bashkim*	0.64	0.71
1900	1.93	2.8	0.47	0.45	0.27	PS, CUP activists, CUP Berlin, IT	(11) ARF*, SC*, AR, IMRO*	0.63	0.50
							(12) PS, CUP activists, ulema, TH, IT, CUP Berlin	0.92	0.50
1901	1.91	3.33	0.52	0.48	0.09	CUP activists, IT, PS, ARF*, IMRO*	(13) PS, ulema, CUP activists, IMRO*, IT, TH, ARF*, Drita*, CUP Berlin, SDHP*	0.45	0.45
1902	2.38	3.43	0.2	0.61	0.3	muvazene, IT, SC*, AR	(14) FO, PS, ARF*, IMRO*, ulema	0.60	0.70
						ER, CUP activists	(15) muvazene, AR, CUP activists, ER, SC*, IT, turk	0.57	0.73
1903	2.38	3.43	0.27	0.57	0.22	ER, AR, muvazene, CUP activists, IT	(16) AR, CUP activists, ER, muvazene, AS, IT, SC*	0.57	0.71
1904	2.34	3.57	0.26	0.63	0.28	IT, CUP activists, AS	(17) FO, PS, AC, ER, zionists*, ARF*	0.58	0.61
						muvazene, MR, AR	(18) AR, CUP activists, muvazene, MR, SC*, IT, turk, AS	0.63	0.72
1905	1.51	3.57	0.2	0.81	0.48	turk, IT, CUP activists, CPU, AR	(19) FO, PS, AC, AS, ARF*, ER, zionists*, SC*	0.50	0.70
							(20) AR, CUP activists, CPU, muvazene, IT, turk	0.75	0.79
1906	2.63	2.77	0.19	0.46	0.43	CPU, AR, IT, turk	(21) FO, PS, AC, AS, ARF*, zionists*, SC*	0.64	0.60
							(22) MNO*, AR, CPU, IT, OFS, turk	0.83	0.88
1907	2.26	2.92	0.34	0.37	0.39	CPU, ARF*, MNO*, AC	(23) AC, AS, ARF**, zionists*, MNO*, SDHP*, PS	0.50	0.54
							(24) FO, CPU, AR, IT, OFS, turk	0.75	0.83
1908	2.15	2.17	0.26	0.33	0.37	ARF*, AC	(25) ARF**, PS, AC, TH, MNO*, zionists*	0.50	0.67
							(26) FO, SDHP*, IMRO*, Bashkim*	0.88	0.73
							(27) CPU, IT	1.00	1.00

* secessionist.

**average path length.

disconnected without the bridges (see Fig. 2). Thus, the polarization expectation finds partial support. Between 1902 and 1905, ideological agreements are mediocre for all except #20, and strategic agreements are equal or above 70 % in all communities except #17 and 20. The theory expects a tight coalition for #20 and umbrella coalitions for the rest, which Fig. 2 confirms. Remarkably, the Majority suffers more ideological disagreements than the Minority —for it contains secessionists, and its strategic agreement levels fluctuate. Cooperation within the Majority sustains thanks to high EC groups like PS. In contrast, the Minority improves its strategic and ideological agreement levels and transitivity —both peak in 1905. Hence, the Minority evolves from an umbrella coalition with a core towards a tight coalition. Fig. 2 confirms these inferences.

During (1906–1908), a tight coalition forms under the CPU leadership and balances the PS-led coalitions (#21, 23, 25). In 1907, the CPU absorbs the Minority and other small groups (Hanioğlu, 2001). This leads us to expect higher agreement levels in the CPU-led coalitions and lower ideological agreement for the PS-led coalitions—given disagreements over the future state and society with secessionists. Table 3 reports above 75 % agreement levels for #22, 24, and 27—suggesting tight coalitions— and mediocre agreements for the PS-led coalitions—suggesting umbrella coalitions. Because there are high EC groups in the 1906 and 1907 networks, umbrella coalitions must have a core. Also, the CPU, like the Minority, does not collaborate with the Majority. Thus, APLs do not shorten in this period despite tightening connections around the CPU, which suggests that the CPU and PS-led coalitions are not directly linked. Fig. 2 confirms that a) the PS-led coalitions are loose umbrella coalitions centered around a few high EC members, b) the CPU-led coalitions are tight, and c) the CPU and PS led coalitions would be disconnected without bridges. Modularity is low in this period, which explains observed single components.

Table 4

Network structure of French coalitions.

Year	APL**	Mean degree	Centralization	Transitivity	Modularity	High Eigenvector centrality groups	Communities	Ideological agreement level	Strategic agreement level
1814	1.33	1.8	0.02	0.75	0.67	defection, royalistG,	(1) constitutionnel, doctrinaires,	0.90	0.50
						bonapartists, republicans, federes	(2) ultras, royalistG, defection	0.87	0.67
1815	1.5	1.33	0.08	0	0.61	doctrinaires,	(3) republicans, bonapartists, federes(4) constitutionnel, doctrinaires,	0.73 0.90	1.00 0.50
						constitutionnels	(5) ultras, royalistG, defection	0.87	0.67
1816	2.11	3.67	0.3	0.6	0.27	radLeftG, centerLeftG, constitutionnels	(6) doctrinaires, constitutionnels, constitutionnelG, doctrinairesG, rovalistG	0.72	0.60
						federes, bonapartists, republican	(7) radLeftG, republicans, bonapartists, federes, centerLeftG	0.72	1.00
1817	2.53	2.91	0.21	0.56	0.2	radLeftG, centerLeftG, constitutionnels	(8) ultras, defection, royalistG	0.87	0.67
						federes, radLeftG, centerLeftG	(9) doctrinaires, constitutionnels, constitutionnelG, doctrinairesG, radLeftG, centerLeft, centerLeftG, radLeft	0.60	0.50
1818	2.53	2.91	0.21	0.56	0.2	radLeft, centerLeft, constitutionnels	(10) ultras, defection, royalistG	0.90	0.67
						doctrinaires, radLeftG, centerLeftG	(11) doctrinaires, constitutionnels, constitutionnelG, doctrinairesG, radLeftG, centerLeft, centerLeftG, redLeft	0.60	0.50
1819	2.67	2.55	0.25	0.47	0.3	radLeft, centerLeft, constitutionnels, doctrinaires	(12) ultras, defection, royalistG, radLeftG,	0.76	0.60
							(13) doctrinaires, constitutionnels, constitutionnelG, doctrinairesG, centerLeft, centerLeftG, radLeft	0.63	0.57
1820	1.56	2.73	0.13	0.72	0.48	doctrinaires, constitutionnels, ultras	(14) ultras, defection, royalistG, constitutionnels, constitutionnelG, doctrinaires, doctrinairesG	0.57	0.57
							(15) centerLeft, radLeft, centerLeftG, radLeftG	0.90	0.50
1821	2.04	3.45	0.25	0.57	0.28	ultras, defection, radLeft, centerLeft	(16) ultras, defection, royalistG, constitutionnels, constitutionnelG, doctrinaires, doctrinairesG	0.57	0.57
							(17) centerLeft, radLeft, centerLeftG, radLeftG	0.90	0.50
1822	1.56	2.73	0.13	0.72	0.48	doctrinaires, constitutionnels, ultras	(18) ultras, defection, royalistG, constitutionnels, constitutionnelG, doctrinaires, doctrinairesG	0.57	0.57
							(19) centerLeft, radLeft, centerLeftG, radLeftG	0.90	0.50
1823	1.56	2.73	0.13	0.72	0.48	doctrinaires, constitutionnels,	(20) ultras, defection, royalistG, constitutionnels, constitutionnelG, doctrinaires, doctrinairesG	0.57	0.57
						ultras, defection	(21) centerLeft, radLeft, centerLeftG, radLeftG	0.90	0.50
1824	1.35	2.18	0.08	0.79	0.57	centerLeft, radLeft,	(22) constitutionnel, doctrinaires, constitutionnelG, doctrinairesG, defection	0.80	0.60
						centerLeftG, radLeftG	(23) centerLeft, radLeft, centerLeftG, radLeftG	0.90	0.50
1825	1.65	2	0.2	0.57	0.31	doctrinaires, constitutionnels, ultras	(24) constitutionnel, doctrinaires, constitutionnelG, doctrinairesG, defection_centerLeft_centerLeftG	0.60	0.57
1826	1.65	2	0.2	0.57	0.31	doctrinaires, constitutionnels, centerLeft	(25) defection, constitutionnels, doctrinaires, centerLeft, constitutionnelsGround, doctrinairesG, centerLeftG	0.60	0.57
1827	1.68	2.22	0.22	0.57	0.18	doctrinaires, constitutionnels, centerLeft	(26) defection, constitutionnels, doctrinaires, centerLeft, constitutionnelsGround, doctrinairesG, centerLeftC	0.60	0.57
1828	2.36	2.46	0.21	0.51	0.46	centerLeft, doctrinaires	(27) defection, constitutionnels, doctrinaires, centerLeft, constitutionnelsGround, doctrinairesG radl eff	0.60	0.57
							accumuncoo, mullen		

1.00 (continued on next page)

0.70

Table 4 (continued)

Year	APL**	Mean degree	Centralization	Transitivity	Modularity	High Eigenvector centrality groups	Communities	Ideological agreement level	Strategic agreement level
1829	1.63	2.36	0.16	0.58	0.43	doctrinaires, constitutionnels, ultras	(28) centerLeftG, bonapartists, republicans, radLeftG (29) ultras, defection, constitutionnels, doctrinaires, centerLeft, constitutionnelG, doctrinairesG	0.57	0.57
							(30) radLeftG, radLeft, bonapartists, republicans	0.75	1.00
1830	1.88	3.54	0.29	0.73	0.33	centerLeft, radLeftG, republicans	(31) defection, constitutionnels, doctrinaires, constitutionnelsGround, doctrinairesG	0.72	0.60
							(32) centerLeftG, bonapartists, republicans, radLeftG, centerLeft, radLeft	0.73	1.00

G: grassroots organizations.

* Average path length.

France

Bourbon France was characterized by the rivalry among the absolutists (the royalists, moderate royalists (defection), and royalist grassroots organizations), the center-right (the constitutionnels, the doctrinaires, and their grassroots), the leftwing (the center and radical leftwing and, their grassroots), and the radicals (the republicans, bonapartists, and fédérés).

As discussed earlier, France was polarized in 1814 and 1815, which leads us to expect disconnected blocs. In accordance, Table 4 reports high modularity scores, and Fig. 3 displays disconnected blocs for 1814 and 1815. At the subgraph level, Table 4 reports high ideological agreements for all communities and average strategic agreements for all except #3. Furthermore, transitivity drops to zero, and mean degree shrinks from 1814 to 1815, which imply loosening connections. For these years, I expect a tight coalition for #3 and umbrella coalitions for the rest. Fig. 3 confirms these expectations except the one for #2— a tight coalition, which can be explained by the unifying effect of threat under polarization.

In 1816, polarization subsides, and a novel actor, the leftwing, emerges. Absent polarization, the theory expects a single component, which finds validation in Fig. 3. For this component, Table 4 reports high mean degree, not too low an APL, and low centralization. These findings suggest that cooperation is deep among some but looser elsewhere. Ideological agreements score high for both communities, while strategic agreements are mediocre for #6 and high for #7. Given the presence of high EC groups in both communities, I expect #7 to be a tight coalition and #6 to an umbrella coalition with a core. Fig. 3 confirms these expectations.

During (1817–1819), the leftwing forms electoral alliances with the constitutionnels against the royalists despite disagreements; but there is no polarization. Therefore, we should see single components and loose cooperation at the graph level due to disagreements. Table 4 reports moderate agreement levels for all except #10 and 8—which have high ideological agreements, and low modularity—supporting the single component expectation. It further communicates low centralization, moderate transitivity, low mean degree, not too short APLs (>2.5) —supporting the loose cooperation expectation at the graph level, and high EC members in #9, 11, and 13. These findings suggest that all communities are umbrella coalitions, including #10—which suffers strategic divides, and #9, 11, and 13 must also display a core. Fig. 3 supports these expectations.

France was polarized again during (1820–1824) (Alexander, 2004). The theory predicts disconnected blocs under polarization. If that is the case, modularity scores must be higher than in previous years, which is the case in Table 4 except for 1821. In accordance, Fig. 3 displays disconnected blocs for all except 1821. Turning to the subgraph level, all

coalitions have mediocre agreements except the leftwing ones (#15, #17, #19, #21, # 23), whose perfect ideological alignment contrasts to moderate strategic agreements. These findings indicate umbrella coalitions. Because communities feature high EC members, umbrella coalitions must display a core. Noticeably, although components are disconnected in these years (except in 1821), connections must be dense since APL is lower and transitivity is higher than during (1817–1819). I expect all coalitions to be umbrella coalitions with a core. Fig. 3 supports my expectations for the center-right–royalist alliances but not the leftwing ones, which are cliques. The leftwing must have united against the rivals despite strategic disagreements. However, strategic disagreements make this coalition fragile. Empirically, the center-left broke with its radical faction that insisted on using violence.

During (1825–1827), coalitions were reshuffled, because the defection splits from the royalists to collaborate with the centrists and the leftwing against the absolutist king. Unification suggests single components. In effect, modularity scores low and high EC groups stand out in this period, and Fig. 3 displays single components with two interlinked isolates representing the royalists. Notice that groups unite; but disagreements linger—Table 4 reports moderate agreement levels for all. Thus, communities must be umbrella coalitions with a core. Fig. 3 confirms these expectations. The cores shorten the APL and boost transitivity, but mean degree stays mediocre. Thus, deep cooperation within the core does not extend to the periphery.

During (1828–1830), France was polarized along absolutism. Under polarization, I expect disconnected blocs. Table 4 reports higher modularity scores for 1828 and 1829 but not for 1830. Fig. 3 shows disconnected blocs for the first two and a single component for 1830. At the subgraph level, agreement levels are mediocre for #27, 29, and 31 and high for #28, 30, and 32. Moreover, there are high EC groups within the former. Therefore, I expect #27, 29, and 31 to be umbrella coalitions with a core and the rest to be tight coalitions. Fig. 3 confirms these expectations. Noticeably, connections tighten from 1828 to 1830 as indicated by shorter APLs and higher transitivity. The theory misses 1830, when connections are the densest of this period.

Changing the regime

This section begins by testing which disagreements do not hinder tie formation and which agreements precipitate it. Tables 5 and 6 report findings of TERGMs. According to Table 5, state type is statistically significant; but society type is not. Agreement on state type makes tie formation 3% and 2% more likely, respectively, before and after 1902, controlling for other parameters. Coalitions form regardless of preferences over society type, which is indicative of discounting. Of strategies, means of regime change and secularization are statistically significant



Fig. 2. Evolution of Ottoman coalitions.

for both periods, whereas foreign assistance is significant for neither. These findings imply that foreign assistance is discounted, and cooperation becomes 5% and 1% more likely if groups agree on means of change, and 1% and 2% more likely if they concur on secularization, respectively, before and after 1902 keeping all other parameters constant. Similarly, controlling for other parameters, minority cooperation makes coalition formation 2% more likely after 1902, suggestive of discounting before 1902. On the other hand, financing from the sultan makes tie formation 1% more likely after 1902, and financing by another contender makes cooperation 2% and 1% more likely before and after 1902 keeping other parameters constant. It follows that cooptation attempts fail after 1902. The most influential factors on tie formation are clustering and past cooperation, making cooperation, respectively, 9% and 18 % more likely after 1902 controlling for other parameters. It follows that Ottoman groups are pragmatic decision makers, who form coalitions predominantly for tactical concerns. They tend to work with partners of trusted partners and renew cooperation that has proven effective. Pragmatism appears to be an adaptive response to having to contend the regime through clandestine organizations before 1897 and from exile after 1897.

Turning to France, suffrage is statistically significant in both periods, making cooperation 9% and 16 % more likely, respectively, before and after 1824 (controlling for other parameters). Secularization is statistically insignificant for both periods, which suggests discounting. The authoritarian-libertarian axis is statistically significant only before 1824, and centralization only after 1824. When significant, the latter's effect on tie formation is close to 0% (keeping other parameters constant). Strategically, ceteris paribus, violence makes cooperation 3% and 1% more likely before and after 1824. Past cooperation is the most influential factor, making tie formation more likely by 17 % and 18 % before and after 1824 keeping all other parameters constant. These findings suggest that French groups are as pragmatic as Ottoman groups. Except suffrage, ideological and strategic issues seem to be secondary to tactical concerns. As discussed in the previous section, most coalitions form to balance some political rival (e.g., the center-right-royalist coalitions vs. the leftwing; the leftwing-center-right coalition against the royalists). Coalitions are renewed if proven effective.

Overall, TERGMs report small effects for homophily along ideologies and strategies (except suffrage) and resource variables for French and Ottoman contenders. Ideological and strategic are secondary to tactical concerns because most coalitions form to balance rivals and are renewed if they prove effective. These results indicate that the unifying effect of ideological affinities is limited. Findings substantiate that coalitions dwell upon both strategic and ideological agreements and are suggestive of discounting along strategic and ideological issues.

Which coalitions are more likely to overthrow the regime? The theory expects the strategically aligned coalitions that discount or settle their ideological differences to be more likely to overthrow the government than the strategically divided ideologically aligned ones. Table 7 classifies Ottoman and French coalitions according to their ideological and/or strategic scores.

According to Table 7, all pre-1902 Ottoman coalitions fall under Categories A and B except #1. Empirically, groups in both Categories A and B faced severe regime repression while in the Empire to which financial difficulties added when in exile; moreover, they were constantly beset by disagreements over revolutionary vs. nonrevolutionary strategies and secularization (Hanioğlu, 2001). These setbacks explain CA failure and lend support to H1. Of the AR and PS-led coalitions in Category A, the AR-led one seems tighter. Still, neither coalitions are strategically converged. In effect, even of the coalitions within Category C, #27 —the CPU-led coalition— is the only one to achieve strategic alignment. The others suffer strategic divides, which, according to the theory, undercuts their CA potential —the PS-led coalitions are additionally beset by ideological divides. Overall, having achieved strategic convergence, #27 is the only one with a substantive potential to overthrow the government. Empirically, it carried out the



Fig. 3. Evolution of Ottoman coalitions.

1908 Revolution, which supports that strategically aligned coalitions are more likely to overthrow the government. Noticeably, the CPU-led coalition has evolved from #22 and 24 into #27. Thus, strategic alignment takes time to achieve. On the other hand, the CPU case does not help evaluate whether ideological alignment is unnecessary, because it already is ideologically aligned.

A striking pattern in the French case is that coalitions to achieve both high strategic and ideological agreements appear after 1828 except #3. Initially, all coalitions of Bourbon France display high ideological agreements but suffer strategic divides except #3. #3 satisfies the strategic alignment condition, but empirically could not change the regime because of severe repression during the White Terror. Following

the rise of the leftwing and its tactical alliance with the center-right, the royalists alone feature high ideological agreements. Yet, this coalition disagrees on using violence as an electoral strategy, which the theory expects to undercut their CA potential. Empirically, the royalist camp grew increasingly fragile with the defection eventually seceding from this coalition. These findings lend support to the theory. Coalitions in Category A display high strategic agreement but are yet to streamline their strategies. Therefore, they are unlikely to overthrow the government. On the other hand, #7, 28, 20, and 32, all satisfy the strategic alignment condition. Yet, #32 is the one that overthrew the regime. Political structure explains why others fail. As mentioned earlier, #7, which represents the newly emerged leftwing, seeks electoral gains

Table 5

TERGM results of Ottoman coalitions.

	Ottoman coalitions		
	Period (1895–1901)	Period (1902–1908)	
edges	-4.168***	-4.688***	
	(0.192)	(0.230)	
clustering (gwesp)	1.814***	1.231***	
	(0.176)	(0.160)	
past cooperation	1.891***	3.183***	
	(0.161)	(0.203)	
financing by the sultan	0.001	-0.495*	
	(0.039)	(0.298)	
financing by the opposition	0.245*	0.261***	
	(0.126)	(0.085)	
state type	0.619***	0.604***	
	(0.133)	(0.188)	
society type	-0.186	-0.049	
	(0.278)	(0.229)	
secularization	-1.066**	0.688**	
	(0.513)	(0.306)	
means of regime change	1.255*	0.421**	
	(0.745)	(0.198)	
foreign assistance	0.152	0.027	
	(0.247)	(0.227)	
minority cooperation	-0.828	1.015***	
	(0.672)	(0.334)	
AIC	1,207.919	826.962	
BIC	1,286.642	905.685	

*p < 0.1; **p < 0.05; ***p < 0.01.

Table 6

TERGM results of French coalitions.

	French coalitions		
	Period (1815–1824)	Period (1825-1830)	
edges	-4.398***	-5.584***	
	(0.414)	(0.765)	
clustering (gwesp)	0.803***	1.156***	
	(0.142)	(0.225)	
past cooperation	2.809***	4.035***	
	(0.215)	(0.425)	
organization type	1.543***	1.640***	
	(0.255)	(0.399)	
executive-legislative	0.098	-0.193	
	(0.255)	(0.474)	
authoritarian-libertarian	-0.915***	-0.571	
	(0.203)	(0.419)	
suffrage	2.035***	3.901***	
	(0.362)	(0.606)	
secularization	0.271	-0.365	
	(0.284)	(0.483)	
violence	0.760***	1.272***	
	(0.242)	(0.364)	
centralization	-0.168	-1.607***	
	(0.267)	(0.533)	
AIC	650.227	299.914	
BIC	710.799	352.862	

*p < 0.1; **p < 0.05; ***p < 0.01.

through cooperation with more established actors rather than overthrowing the regime. The remaining leftwing coalitions, though they are ideologically divided, are ready to act given an opportune moment—since ideological issues other than suffrage and centralization are likely to have been discounted after 1825 and centralization has no practical significance according to TERGM results. That opportunity presents itself only in 1830 with the outbreak of protests. Empirically, the protests started on independently of the leftwing; but once they did, the leftwing took control and set the next regime type. This finding supports that strategically aligned coalitions are more likely to regime change, but these coalitions need not be ideologically aligned.

Table 7

Categorization of Ottoman & French coalitions by agreement levels.

	Category A: High strategic agreement	Category B: High ideological agreement	Category C: High strategic & ideological agreement
Ottoman Empire	#10, the AR-led coalitions (#15, 16, 18), and the early PS-led coalitions (#14, 19)	#3, 5, 6, 7, 9, and 12	#1 and 26, and the CPU-led coalitions (#20, 22, 24, 27)
France	the royalist coalitions (10, 12, 31), the center-right coalitions (22), and the leftwing coalitions (15, 17, 19, 21, 23)	the center-right coalitions (#1, 4, 6), and the royalist coalitions (#2, 5, 8, 10, 12), #30	#3, the leftwing coalitions (#7, 28, 30, 32)

Conclusion & discussion

This article proposed a novel theory on the effect of disagreements on coalition shape and coalition capacity to change the regime. Social movement scholars concur that coalitions dwell upon a certain level of agreement and seek the root of these agreements in ideologies and identities. Although they are associated with coalition formation and CA, ideological and identitarian affinities are not sufficient for CA. In cases like the Islamist-leftwing coalition in 1979 Iran, coalitions form and take CA despite ideological disagreements. In other cases, CA does not unfold despite ideological affinities—e.g., leftwing parties in Interwar Europe. Thus, I flipped the question and asked when disagreements do not hinder coalition formation and which agreements make coalitions more likely to change the regime.

A key contribution of this paper was to propose discounting as a mechanism to explain when disagreements do not deviate actors from coordinating a solution point in revolutionary situations. When they discount some disagreement, actors postpone its settlement; coordination becomes easier. While both strategic and ideological issues can be discounted, I hypothesized that groups are more likely to overthrow the regime if they streamline their strategies and settle or discount their ideological differences—since ideological preferences are harder to change in the short-run. This theory is rather intuitive. Actors adopt the strategy they find most effective given a circumstance. If they pick different strategies, as in the case of the Majority and the Minority, they are unlikely to cooperate even if they envision the same goal. Conversely, if they adopt the same strategy, ideological opponents may work against some shared opponent, which explains why coalitions of strange bedfellows carry out revolutions.

In emphasizing the role of strategic alignment, I do not claim to predict the timing of regime change-that cannot be predicted. In both cases I examined, revolution began with protests, which started independently of the regime changing coalitions. The center-left in France and the CPU in the OE took control of protesters and set the next regime type. Had protests not broken out, revolutions might not have occurred in 1830 and 1908. Concurrently, the leftwing coalitions of 1829 and 1828 (which displayed perfect strategic alignment) could also have changed the regime had the opportunity presented itself. Thus, the theory aims to detect which coalitions are ready to overthrow the regime given opportune circumstances. Empirically, the leftwing coalitions and the CPU-led coalition distinguished from their rivals by their strategic alignment. Ideological disputes were discounted within the former and settled within the latter, which supports that ideological alignment is not necessary for regime change. This argument applies to out of sample cases, such as early 20th century Russia, where the strategically harmonious tight Bolshevik coalition acted more harmoniously than the larger and looser Menshevik coalition.

Another key finding was that disagreement type and level affect

coalition shape. Applying multiple networks metrics on French and Ottoman coalitions, I found an association between a) ideological polarization and disconnected blocs, and single components and their lack thereof, b) medium agreement levels and umbrella coalitions, and c) high agreement levels and tight coalitions. These associations transcended contextual specificities of Bourbon France and the OE. While empirical observations confirmed an overwhelming majority of my theoretical expectations, the theory has a shortcoming; polarization is an exogenous variable that cannot be derived from agreement types and levels. On the other hand, agreement levels can be calculated for any coalition so long as issue dimensions and preferences are known. For historical cases, issues and preferences can be identified from primary and secondary sources. For contemporary cases like the Occupy and Gezi movements, they can be derived from interviews, press releases, or organizational documents. As a matter of fact, the theory applies to cases of coalition formation from international alliances to terrorist networks.

The analysis of the Ottoman and French datasets highlighted certain patterns. First, disconnected blocs generally are umbrella shaped, because, while polarization makes actors take sides, and blocs form, these blocs are not necessarily tight coalitions. Rather, they are umbrella shaped because actors unite against shared opponent without settling differences—e.g., post-1817 French coalitions and Ottoman coalitions during (1895-1897). Second, umbrella coalitions come in different shapes. Some revolve around a core-e.g., the constitutionneldoctrinaire coalitions during (1821-1830). Others are sparse and decentralized-e.g., the center-right and royalist coalitions in 1815. Third, the rise of a tight oppositional coalition is a process. Initially, preferences differ, and connections are loose (even under polarization). Connections tighten as interests grow more compatible through learning and updating. That said, not all tight coalitions are ready to change the regime when the opportunity presents. Such capacity requires coordinating diverse strategies and overcoming ideological differences.

The shape and CA arguments contribute to several debates in social movements studies, applied network analysis, and political science. By using Ottoman and French regimes as theory-generating cases, I amassed rich contextual information from in-depth case studies to test the effect of ideological and strategic disagreements. Small sample size is a significant limitation of this paper; more studies are needed to validate the argument. Another limitation concerns the testing of discounting with TERGMs on historical datasets. Historical datasets are vulnerable to missing information for various reasons, including clandestine groups having eliminated organizational documents. Yet, my cases being historical, it is not possible to provide further evidence using experiments or interviews. Therefore, I relied on TERGMs to provide statistical evidence to discounting. While accentuating the role of strategic alignment, I do not claim that it alone explains coalitions' capacity to change the regime. Opportunity structures and resources matter as well. I controlled for political process and opportunities through periodization, and resources by control variables, including financing from the sultan and financing from contenders in the Ottoman case, and mobilization capacity of grassroots vs. parliamentary factions in the French case. My analysis found evidence for the independent effect of strategies and ideologies even after taking these factors into account. Thus, strategic alignment complements political opportunity and resource arguments. Finally, the theory carries an important message to policy makers; they are more likely to mobilize support by proposing concrete policy measures than by merely stressing shared grievances and ideals.

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Appendix A. Supplementary data

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