

Translating Social Cleavages into Party Systems: The Significance of New Democracies

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Abstract

This paper focuses on new democracies in Eastern Europe and addresses two questions about the translation of social cleavages into political oppositions. The first question concerns the translation of pre-existing cleavages. In brief, does the evolution of new party systems influence the politicization of social conflicts? The second question concerns the translation of new social cleavages, i.e. cleavages that emerge once a party system freezes. In a nutshell, can a new social cleavage be politicized? To answer these questions, the paper integrates a formalization of social cleavage theory with a game-theoretic model of a new party system. The first result is that translation of pre-existing cleavages depends on which parties survive the early rounds of electoral competition. In fact, depending on which parties survive, the axis of political conflict can shift by “90 degrees.” This implies that party systems in new democracies should be seen as important founding moments when political actors determine the long-term axes of political conflict. The second result is that once a party system freezes the politicization of a new social cleavage is difficult. It is possible, indeed, that a new social cleavage will remain politically dormant. In the context of Eastern Europe, this result suggests that political salience of class conflict is likely to be low because competitive elections and political parties predate the entrenchment of property-owning classes.

1 Introduction

Party systems in Eastern Europe's new democracies frequently undergo a period of organizational fragmentation. In country after country, we see a large number of political parties contest the first several elections without securing sizable electoral support. Although such fragmentation is widely seen as undesirable, the general expectation is that over time these party systems will consolidate. Consequently, the period of organizational confusion is frequently perceived as a temporary phenomenon without a wider theoretical significance. If stable political parties emerge sooner or later, then the chaotic competition between personalistic "proto-parties" that lack organizational stability and ideological cohesion is perhaps unfortunate, but not particularly interesting, at least not for the purpose of addressing larger theoretical issues. Contrary to this perception, I argue that party systems in these new democracies are theoretically significant. They raise two distinct questions about the translation of social cleavages into political oppositions – a kernel of contemporary theorizing about political parties and party systems.

The first question concerns the translation of pre-existing social conflicts into durable axes of political contestation. The problem can be stated as follows. Imagine a new democracy with a history of conflict on two issues, say ethnicity and religion. It is possible that as the new party system in this country consolidates both of these conflicts become politicized and thus established as long-term bases of electoral competition. It is also possible, however, that only one of these conflicts becomes politicized because politicians find it beneficial to de-emphasize the political salience of the other¹. In short, a single structure of social conflict can

¹To anchor ideas, consider briefly the example of Russia. The country has a women's party, The Women of Russia, and a number of environmental parties. It is possible that all of these parties survive. It is very likely, however, that some of them will not. For instance, if The Women of Russia permanently withdraws from electoral competition while at least one environmental party survives, then in this respect Russia's

give rise to several structures of political contestation. This possibility raises the question of whether the evolution of a new party system affects the translation of social cleavages into political oppositions. More specifically, does the shake down of political parties that takes place during the early rounds of electoral competition influence the long-term bases of political contestation?

If the answer is no, then the organizational fragmentation characteristic of new party systems is not particularly interesting. If an established party system reflects all pre-existing social conflicts regardless of what happens during the early rounds of electoral competition, then new party systems lack wider significance. If, however, the answer is yes, then we ascribe to the period of initial fragmentation considerable relevance. If the axes of political competition can diverge from the underlying social conflicts, and if the character of this divergence is determined during the early rounds of electoral competition, then new party systems are pivotal. Indeed, they are the founding moments when political actors determine which cleavages to de-politicize and which to establish as the permanent axes of political competition.

The second question focuses on the politicization of new social cleavages, i.e. cleavages that emerge once a party system is already frozen. If a social cleavage emerges after a new party system consolidates, will it become politicized, or will it remain politically dormant? This question is particularly interesting in the context of Eastern Europe where the cleavage between capital and labor is likely to emerge only after these party systems consolidate. As is well known, communist states were remarkably successful in destroying property-owning classes by abolishing the legal right to own large-scale property. Consequently, when democratic party system will resemble the party system in Germany, which has a strong environmental party but no feminist parties. If on the other hand, The Women of Russia survives while environmental parties fold, Russia's party system will resemble the party system in Iceland, which has a strong feminist party but no environmental parties.

racy came to Eastern Europe, these countries did not have entrenched classes of property-owners akin to those that existed when Western Europe became democratic. To be sure, Eastern Europe's current commitment to property rights will eventually recreate a class of wealthy individuals and so lead to a clear separation between owners and laborers. However, and this is very important, competitive elections and political parties predate the emergence of this class. This is in stark contrast to Western Europe where the historical sequence of events was just the opposite – the cleavage between capital and labor emerged before democracy. In fact, the contention between owners and laborers in the secondary economy led to the creation of powerful socialist parties and so turned economic class into a fundamental basis of political contestation. The likely reversal of this historical sequence in Eastern Europe prompts students of the region to consider not only the translation of pre-existing cleavages into political oppositions but also the translation of new cleavages that emerge after party systems freeze² More specifically, if the freezing of Eastern European party systems predates the emergence of class conflict, will class conflict acquire the degree of political salience that it enjoys in the established democracies of Western Europe?

If the answer is yes, then we should expect that as the new party systems mature, class conflict will become increasingly politicized, and Eastern Europe will come to resemble Western Europe. If the answer is no, then Eastern European party systems will differ from their West European counterparts. Indeed, with regard to the political salience of class, they will resemble the party system in the United States where class conflict clearly exists but where its political salience is decisively muted.

²To make this issue more concrete consider, for instance, Poland. In that country, the two largest parties (as measured by the share of parliamentary seats after the 1997 election), the post-Solidarity AWS and the post-communist SLD have strong ties to labor unions. At the same time, however, both have developed very close connections to the class of newly wealthy. As a result, while they differ in their views on religion, both parties straddle the emerging class cleavage, and their economic policies are quite similar.

The rest of the paper is organized as follows. The next section briefly reviews the main tenets of social cleavage theory. In particular, it identifies two distinct strands of the theory: the “strong” version, which presumes that all social cleavages are politicized and the “weak” version, which allows for the possibility of non-politicization. The strong version is more parsimonious because it allows us to focus exclusively on the history of social conflict. In contrast, the weak version requires that we consider not only past conflicts but also the contemporary politics of new party systems. Given these different informational requirements, the following section aims to adjudicate between the two strands. To this end, the section contains a formalization of social cleavage theory and presents a proof, which states that if a coalition of different social groups comes to support the same political party, then social cleavages can be non-politicized. This result implies that the evolution of a new party system can affect the translation of cleavages into oppositions. We should, therefore, focus our attention on the weak interpretation of social cleavage theory.

The weak version, however, requires that we develop a micro-mechanism of translation that explicitly relates the evolution of a new party system to the politicization of social cleavages. To this end, the following section analyzes a game-theoretic model of party-system consolidation. The model delivers two main results. First, it shows that politicians in new democracies are confronted with dual incentives: to proliferate the number of political parties in the short run and to reduce the number of parties in the long run. Second, the model explains the logic behind the freezing of party systems: Party systems freeze when politicians resolve a coordination problem with regard to entry into electoral competition. The next two sections spell out the implications of these two results for the translation of social cleavages into political oppositions. In particular section five argues that the evolution of new party systems affects the politicization of pre-existing cleavages, while section six maintains that once a party system freezes new social cleavages are likely to remain politically dormant. The final section concludes with a summary.

2 Cleavage Theory and Transitional Party Systems

Scholars working within the social cleavage tradition stress that the translation of social cleavages into political oppositions is by no means automatic. Lipset and Rokkan [8], for instance, are clear that “... cleavages do not translate themselves into party oppositions as a matter of course,” (p. 112) and they argue that a “crucial point in the discussion of the translation of the cleavages structures into party systems [are] the costs and the pay-offs of mergers, alliances, and coalitions.” (p. 117) However, and this is very important, the authors never precisely state whether the “considerations of organizational and electoral strategy ... the weighting of pay-offs of alliance against the losses through split-offs” (p. 112) shape the final outcome of translation. This ambiguity was pointed out already by Sartori [11] who wrote the following:

The problem is not that ‘cleavages do not translate themselves into party oppositions as a matter of course.’ The problem is also that some cleavages are not translated at all. Furthermore, the importance of the notion of translation calls for translators, thereby focusing attention on translation handling and/or mishandling. The old-style sociology took for granted that cleavages are reflected and not produced by the political system itself. As a result, there is very little that we really know concerning the extent to which conflicts and cleavages may either be channeled, deflected and represented, or vice versa activated and reinforced precisely by the operations and operators of the political system. But we are required to wonder whether ‘translation mishandling’ may largely contribute to the cleavage structure that one finds in the polities characterized by low coincidence of opinions. (p. 176)

In short, at the heart of social cleavage theory lies an important ambiguity: can the formation of mergers, alliances, and coalitions seriously affect the translation of cleavages into oppositions? While we all agree that the process of translation is not mechanical, we have not reached a theoretical consensus as to whether mergers can influence the final outcome of this process. As a result, we do not know whether Sartori's conjecture is in fact correct and whether coalition making can lead to a situation where an important social cleavage is not politicized.

Broadly speaking, there are two options. One possibility is to maintain that coalition-making does not affect the final outcome of translation. Regardless of which coalitions are formed, or whether coalitions are formed in the first place, all social cleavages become translated into political oppositions. Think of this view as the "strong" interpretation of social cleavage theory. Under this interpretation, there is no reason to study coalition formation because all relevant information is contained in the structure of social conflict. The other possibility is that coalition-making influences the final outcome of translation because alliances lead to a de-politicization of some social cleavages. Think of this view as the "weak" interpretation of social cleavage theory. According to this interpretation, coalition-making is a central component of the over-all theory. Information about the structure of social conflict is necessary but not sufficient to account for the axes of political competition. We must also include information about coalition-making.

Although it might be tempting to dismiss the strong interpretation as a form of sociological determinism, or, to use Sartori phrase, as "old-style sociology" this version of the theory is in fact very attractive. If an important aim of social science is to construct parsimonious theories of complicated social phenomena, then the strong version of the theory meets this objective remarkably well. It allows us to make long-term predictions about the future axes of political conflict of entire party systems based exclusively on our knowledge of past social conflicts. In particular, it makes it possible to cut through the chaotic politics of

new party systems and generate testable projections about the future substance of political contestation. If a polity has a history of social conflict on issues x and y , then the strong version implies that its electoral politics will also center around these two issues. This is indeed why this version of the theory can be regarded as “strong.”

In contrast, the “weak” interpretation of the theory is considerably more complicated. In particular, it requires that in addition to our knowledge of past social conflicts, we also incorporate information about coalition-making. If social conflicts can be non-politicized, then a society with historical cleavages on issues x and y can evolve in four different ways: (a) both conflicts are translated, (b) only conflict on issue x is translated, (c) only conflict on issue y is translated, or (d) none of the conflicts are translated. The actual outcome is left to the interplay of political forces, and to point out that outcome we must say something about this interplay. Since the politics of new party systems is messy, this is a considerable complication. Consequently, from the point of view of parsimony, the strong version of the theory is preferable. Notice, in fact, that the weak version of social cleavage theory prompts us to specify an explicit micro-mechanism of translation. If we argue that mergers, alliances, and coalitions can lead to a situation where an important social cleavage is non-politicized, then it is desirable to have a careful, theoretic account of how such coalition-making affects the process of translation. Without it, a central component of the over all theory – the actual translation of cleavages into oppositions – remains under theorized.

It is worthwhile to point out that while the strong version of social cleavage theory is not intellectually hegemonic, it does influence the small but growing literature that seeks to understand the bases of political conflict in East Europe’s new democracies. Take, for example, Evans and Whitefield [3] who effectively rely on the strong version of the theory to anticipate the permanent bases of political competition in several East European countries. Entering into a polemic with Kitschelt’s [6] pioneering application of the weak version of social cleav-

age theory³ to study party systems in the region, Evans and Whitefield argue that the bases of political competition will be determined by three variables: economic development, ethnic homogeneity, and the historical status of the state. In particular, they distinguish three cases: (a) countries that are economically advanced, ethnically homogeneous, and have an established statehood (Czech Republic, Hungary, and Poland); (b) countries that are economically advanced, ethnically diverse, and have a recent statehood (Estonia, and Latvia), and (c) countries with small chances of success in market reforms, regardless of their ethnic makeup and history of statehood (Bulgaria, Belarus, Romania, Russia, and Ukraine). For the first group, they predict that political parties will compete along class lines. In contrast, they predict that in the second group, party competition will be structured along ethnic lines. Finally, for the third group, they claim that the problem of marketization will provide the principal axis of political competition thus overriding ethnic and class divisions.

Notice the parsimony of the over all argument. The authors simply identify the structure of social conflict (economic class and ethnicity) and then cut through the organizational confusion of the new party systems to make projections about the long-term axes of political conflict. They make no reference to political parties, and they are not concerned that

³The classification of Kitschelt's argument as representing a weak version of social cleavage theory is not entirely correct. While being consistent with the weak version, Kitschelt ascribes even more influence to political elites. In particular, he persuasively maintains that on occasion politicians enter into conflicts that do not reflect underlying social cleavages. This is an important insight. As an example of such conflicts consider the East European debates over the pace of economic reforms, or the Russian debates over war against irridentist regions, or the Czech, Hungarian, and Polish debates over their entry into the European Union. All of these are instances of critical, "one-shot" decisions that may or may not map themselves into underlying social cleavages. From the perspective of social cleavage theory, these decisions constitute exogenous shocks that temporarily perturb the political system. Over time, however, as these "one-shot" decisions are made (economic reforms are completed, wars are ended, accession treaties signed), the political salience of these issues subsides, and the system reverts to its steady-state, where political oppositions reflect underlying social tensions.

coalition-making might blur or de-politicize cleavage lines. Indeed, the authors argue that the proliferation of parties in some of these countries “may serve to obscure the major dimensions of party competition.” (p. 541) In effect, therefore, their analysis proceeds along the lines suggested by the strong interpretation of social cleavage theory: information about the structure of social conflicts is sufficient to identify the bases of political competition, and there is no need to worry that coalition-making could lead to a situation where an important social cleavage fails to be translated into an opposition between political parties. It is precisely this assumption that endows their over all argument with its elegant simplicity.

3 A Logical Structure of the Social Cleavage Theory

Given the ambiguity in the current formulation of social cleavage theory and given the considerable difference between the strong and the weak interpretations of the theory, it is important to know which of these two interpretations is more plausible. Are we justified in assuming that coalition-making exerts no effect on the translation of cleavages into oppositions, or must we forgo the strong interpretation and settle for the more complex, weaker interpretation?

3.1 Notation and Definitions

To answer this question, consider the following formalization of social cleavage theory. Let $X = \{x_1, x_2, \dots x_n\}$ be the set of issues, or socio-cultural dimensions, on which people might differ. Let $C = \{c_1, c_2, \dots c_k\}$ be the set of social clusters, or groups of individuals, who hold similar opinions on all issues. Let $O = \{-1, 1\}$ be the set of opinions that a cluster can have on an issue. Finally, let $o : C \times X \rightarrow O$ be a function that describes the opinion held by

each cluster on each issue. Given this notation, we can define a social cleavage as follows.

Definition 1 *A social cleavage exists on issue $x \in X$ if and only if there exist clusters $c_i, c_j \in C$ such that $o(c_i, x) = 1$ and $o(c_j, x) = -1$*

This definition captures the intuitive notion of a social cleavage as a line that separates two groups of people who disagree on some issue. Thus, if all social clusters hold the same position on an issue, then there is no conflict, and a social cleavage does not exist on that issue.

To give a substantive meaning to these symbols, recall Lipset and Rokkan's discussion of social cleavages that characterized Western Europe in the early twentieth century. They trace the emergence of these cleavages to the national and the industrial revolutions. The national revolution generated two conflicts: (a) "the conflict between the central, nation-building culture and the increasing resistance of the ethnically, linguistically, or religiously diverse subject populations in the provinces and the peripheries," (p. 101) and (b) "the conflict between the centralizing, standardizing, and mobilizing nation-state and the historically established corporate privileges of the Church." (p. 101) The industrial revolution in turn led to the following two conflicts: (c) "the conflict between the landed interests and the rising class of industrial entrepreneurs," (p. 101) and (d) "the conflict between the owners and employers on the one side and the tenants, laborers, and workers on the other." (p. 101) In the formal language introduced above, this proposition can be restated as an empirical claim that the set of socio-cultural dimensions X on which Europeans differed at the end of the XIX century consisted of four elements: x_1 – the conflict between the subject vs dominant culture; x_2 – the opposition between the church and the government; x_3 – the division between workers and owners, and finally x_4 – the conflict between urban and rural economies.

Now, if a given social cluster can take one of two positions on each of these four issues, we have that in each country the set of social clusters C can consist of at most 16 elements. Each of those clusters is uniquely defined by the opinion it holds on the four socio-cultural conflicts, i.e. by a four dimensional vector of ones and negative ones. To identify a specific cluster, we need to adopt a convention for how to score a position taken by each cluster on each issue. Throughout the paper, I adopt the following rule. On the first dimension, dominant cultures score 1, while subject cultures score -1. On the second dimension, secular clusters score 1, and the clerical clusters score -1. On the third dimension, owners score 1, while workers score -1. Finally, on the fourth dimension, urban clusters score 1, while rural clusters score -1. Applying this convention to Germany, for example, we would denote a cluster of German landowners who are Catholic as $(1, -1, 1, -1)$, and a cluster of German workers who are Catholic as $(1, -1, -1, 1)$. We would say that these two social groups are separated by two different cleavages: owners vs. laborers and urban vs. agrarian. Since both groups share the same religion and the same ethnicity, they are not separated by either the religious vs secular cleavage or the dominant vs. subject culture cleavage. Notice, moreover, that the definition of a social cluster as a set of individuals who share similar positions on all divisive issues is quite flexible. In particular, it allows us to construct larger political categories that consist of several social clusters. Thus, for example, we can think of a religious camp that includes Catholic land-owners and Catholic peasants. While all members of this camp share a similar opinion about religion, they might differ in their views about other issues, for instance, about land reform.

Now consider the definition of a party system. Let $X = \{x_1, x_2, \dots x_n\}$ be the set of issues. Let $\Pi = \{\pi_1, \pi_2, \dots \pi_m\}$ be the set of political parties. Let $P = [-1, 1]$ be the set of positions that a given party can take on a given issue. Let $p : \Pi \times X \rightarrow P$ be a function that describes the position taken by each party on each issue. Notice an important difference between social clusters and political parties. On a given issue, a social cluster can have one of two opinions:

$\{-1, 1\}$. In contrast, a political party can select from an entire range of policy positions: $[-1, 1]$. This allows us to handle a situation where political party represents several groups and has to adopt a compromise position on a number of issues that divide these groups.

Since each political party can choose from a range of policy positions, political oppositions are not perfectly analogous to social cleavages. However, in the spirit of the previous definition, we can define political oppositions as follows:

Definition 2 *A political opposition exists on issue $x \in X$ if and only if there exist parties $\pi_i, \pi_j \in \Pi$ such that $p(\pi_i, x) > 0$ and $p(\pi_j, x) < 0$ and for all parties $\pi_k \in \Pi$, $p(\pi_k, x) \neq 0$.*

This definition makes intuitive sense. Analogously to a social cleavage, we think of a political opposition as a line that separates two or more political parties that disagree on some issue. The purest instance of this is when there are parties on both extremes of an issue and no party in the center. The direct opposite of this scenario is when all political parties occupy the same position on a given issue. Should this happen, the party system exhibits a consensus, and a political opposition does not exist on that issue.

Since the core of social cleavage theory concerns the translation of socio-cultural conflicts into political oppositions, we need to specify when a social cleavage is translated into a political opposition, and when it is de-politicized. To this end, consider the following definition.

Definition 3 *A social cleavage is politicized if and only if a social cleavage exists on issue $x \in X$ and a political opposition exists on that issue.*

The final step in the logical structure of social cleavage theory is the relationship between political parties and social clusters. A critical component of the theory is the claim that political parties represent specific social groups. Typically, this notion is taken to mean that

the policy positions adopted by a political party are influenced by the opinions of its social clusters. To formalize this correspondence, I adopt the convention that the policy position adopted by a political party on a given issue is the average of the opinions held on that issue by the social clusters represented by that party. More formally, if we let $K(\pi) = \{c_1, \dots, c_n\}$ denote the coalition of social clusters represented by political party π , then the position taken by that party on issue x is defined as follows:

$$p(\pi, x) = \frac{1}{n} \sum_{i=1}^n o(c_i, x) \quad (1)$$

This convention makes an intuitive sense. For example, if a political party represents only one social cluster, then its policy position on all issues is identical to the opinions held by that cluster. If, on the other hand, a political party represents two clusters, then its position on issues where these two clusters agree reflects this underlying consensus. Conversely, on issues where these two clusters disagree, the party adopts a compromise position and takes a centrist stance. Finally, if a political party represents three or more clusters, then on issues where these clusters disagree the party also adopts a compromise position. In this case, however, the compromise need not be centrist. Rather, it can deviate from zero depending on the number of clusters that favor one extreme over the other.

3.2 Coalitions and De-Politicization

With the core concepts of social cleavage theory in place, we can consider the main question of this section, namely whether the emergence of coalitions that contain several social clusters can lead to a de-politicization of a socio-cultural cleavage. The following proposition has the answer (See Appendix for the proof.)

Proposition 1 *If coalitions containing more than one cluster emerge, then at least one social cleavage might become de-politicized.*

To see the intuition behind this result, imagine a new democracy with a history of conflict between secular and religious movements and a division between urban and rural populations. Consider what happens in this setting if multi-cluster coalitions emerge, i.e. if a single political party comes to represent several social groups. Imagine, for instance, that the urban-seculars and urban-clericals support a single party and that the same thing happens with the two agrarian clusters. We thus obtain a country with two political parties, each representing two different social clusters. The urban party represents the clusters of urban-seculars and urban-clericals, while the agrarian party represents the clusters of rural-seculars and rural-clericals. Now, recall that if a political party represents more than one social cluster, then its policy position on a given issue depends on whether or not its clusters agree on that issue. In particular, if the two clusters agree, then the party's policy position on that issue reflects this consensus. If, on the other hand, the two clusters disagree on some issue, then the party adopts a centrist position. This convention implies that the urban and rural party adopt extreme positions on the urban-rural dimension, and that they both adopt a centrist position on the religious dimension. As a result, the urban-rural conflict translates into an opposition between an urban and a rural parties, but the socio-cultural conflict between seculars and clericals does not. In fact, the cleavage ceases to exist as a political issue.

The contribution of proposition 1 is to resolve an ambiguity in the current formulation of social cleavage theory. By showing that coalition-making can de-politicize social cleavages, the proposition implies that the strong version of social cleavage theory is hard to sustain and that we should focus our attention on the weak version of the theory. It turns out, then, that Sartori's conjecture is correct (at least as a matter of logical consistency): the "operators of the political system" can deflect and channel social conflicts in a way that destroys their political salience.

However, if we “retreat” to the weak version and argue that mergers, alliances, and coalitions can de-politicize social conflicts, then it is desirable to develop an explicit micro-mechanism that relates the evolution of new party systems to the translation of social cleavages into political oppositions. Notice, in fact, that so far the paper has been silent about the actual mechanism through which multi-cluster coalitions emerge. All that proposition 1 says is that if such coalitions emerge, then some cleavages can be de-politicized. While this is sufficient to establish that we should focus our attention on the weak interpretation, it tells us nothing about how or why such coalitions might emerge in new democracies. To tackle this problem head on we need to develop an explicit mechanism that relates coalition-making to the politicization of social cleavages. Without such mechanism, an important component of the over all theory – the actual translation of cleavages into oppositions – remains under developed.

4 A Simple Theory of Translation

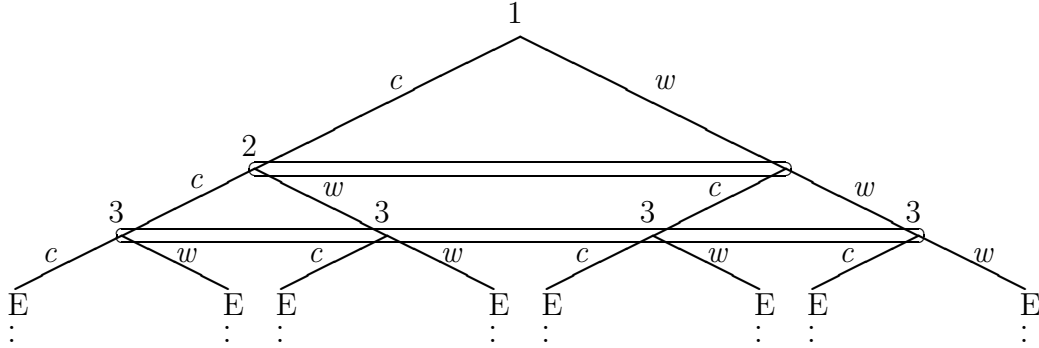
As explained above, Lipset and Rokkan are clear that the translation of social cleavages into political oppositions takes place through strategic interactions among political elites engaged in the construction and the subsequent maintenance of political parties. Consequently, the task of this section is to propose a simple theory of how such strategic interactions shape the process of translation. To this end, I turn to game theory, which at present offers the most precise, though not always satisfactory, method of constructing theories of strategic behavior. What follows, therefore, is a game-theoretic model of how political elites simultaneously shape the consolidation of new party systems and the politicization of social cleavages.

4.1 The Model

Think of a democracy in explicitly dynamic terms as a system of repeated elections. Index each election by $t \in \{0, 1, 2, \dots\}$. Before each election, three politicians 1, 2, and 3 simultaneously decide whether to compete or to withdraw. Once these decisions are made, an election takes place. From the perspective of a politician, each election is a lottery that determines who wins and who loses in a given period. In particular, in each period, the winner is selected at random from players who chose to compete in that period. Thus, for instance, if two politicians decide to compete, then each of them has a $\frac{1}{2}$ chance of winning. The winner gets $s - c$, where $s > 0$ represents the spoils of office, and $c > 0$ denotes the costs of campaigning. Politicians who chose to compete but do not win get $-c$, and players who withdraw get 0. Politicians maximize the discounted sum of these per-period pay-offs with $\delta \in (0, 1)$ being the discount factor. (See appendix for the formal definition of the game.)

The figure below contains the diagram of the game. Players are numbered 1, 2, and 3. The letters c stand for competing, and the letters w stand for withdrawing. The two horizontal ovals denote information sets signifying that the three players make their decisions simultaneously. The letter E indicates that an election takes place after the three politicians make their decisions. Finally, the two dots following E show that the game continues to the next period.

The Extensive Form of the Party Shake-Down Game



To give a substantive meaning to this scenario, return to our example of a country with a history of conflict between secular and religious movements and between the urban and the rural segments of the population. Imagine that the rural electorate is predominantly religious that so the secular-rural cluster is not politically viable. Consequently, the electorate can be partitioned into three clusters: Social Democrats with opinions $(1, 1)$, Christian Democrats with opinions $(1, -1)$, and Agrarians with $(-1, -1)$. In this context, it is natural to think of the three politicians 1, 2, and 3 as a Social Democrat, a Christian Democrat, and an Agrarian.

4.2 Party Shake-down

As is frequently the case with formal models, this game has a number of equilibria. Here, I focus on a symmetric, subgame-perfect, Nash equilibrium in mixed strategies. This equilibrium is appealing on empirical grounds because on the equilibrium path, the number of candidates who chose to compete decreases over time. Thus, as the party system matures we observe a shake-down among political parties. The following proposition has the result. (See appendix for the proof.)

Proposition 2 *For $s \in (2c, 3c)$, the consolidation game has a symmetric, subgame-perfect,*

Nash equilibrium in mixed strategies. In this equilibrium, politicians play as follows: if no politician has withdrawn, then in the current period each politician competes with probability q ; if ever a politician chooses to withdraw, then that person continues to withdraw, while all other politicians continue to compete.

On the equilibrium path, party system fragments with a positive probability $q \times q \times q$ that all three politicians choose to compete. More generally, such three-way fragmentation persists through the first t elections with probability q^{3t} . This allows us to compute the expected duration of political fragmentation, i.e. the average number T of consecutive elections in which all three politicians compete. As shown in the Appendix, we get that

$$T = \frac{q^3}{1 - q^3}$$

Under the assumption that $s \in (2c, 3c)$, this expression is strictly positive yet finite ($+\infty > T > 0$). Consequently, the equilibrium generates the probabilistic prediction that during the early rounds of elections, politicians in new democracies choose to fragment their party system. Eventually, however, this fragmentation ends because one of the politicians decides to permanently withdraw from electoral competition. As a result, a new party system undergoes a period of organizational fragmentation followed by a period of organizational stability.

The model generates two results. First, it shows that politicians in new democracies are faced with dual incentives with regard to competition. On one hand, they have a clear incentive to consolidate their party system by reducing the number of political parties. These incentives flow directly from the per-period pay-offs received by each candidate. While all three politicians compete, all three of them get $\frac{1}{3}s - c$, which is strictly less than 0 and, of course, strictly less than $\frac{1}{2}s - c$. Consequently, all three of them are better off when one of them simply withdraws. In this respect, the model is consistent with the very important line of research initiated by Duverger [2] and most recently advanced by Cox [1] that argues

that electoral systems create incentives to reduce the number of political parties⁴. At the same time, however, the model suggests that politicians have an incentive to temporarily postpone the consolidation of their party system. While all three candidates are better off when one of them withdraws, none of them wants to withdraw first. The candidate who withdraws gets 0 for the rest of the game, but the candidates who hold out get $\frac{1}{2}s - c$ for the rest of the game, which is strictly greater than zero. In short, while they have a common interest in reducing the number of political parties, politicians in new democracies also have conflicting interests as to who is going to pay the costs of this reduction.

The second result of the model concerns the freezing of party systems. In the equilibrium, once one of the candidates withdraws from electoral competition, then that politician continues to withdraw for the rest of the game, while politicians who chose to compete continue to compete. As a result, the party system settles into a steady state where two established parties dominate electoral competition. Politicians who withdrew continue to withdraw because they expect that politicians who competed will continue to compete. Under these expectations, the probability of winning is too small, and the costs of campaigning outweigh the expected benefits. It follows, that withdrawal is the best course of action. Conversely, politicians who competed continue to compete because they expect that politicians who withdrew will continue to withdraw. Given these expectations, the probability of winning is sufficiently large, and so the expected benefits of competition are greater than the costs of campaigning. As a result, competition is the way to do.

In short, once one of the politicians withdraws, all politicians establish clear expectations about who is going to compete and who is going to withdraw. Once these expectations are set, three-way competition is prevented. Indeed, the reason why all three politicians are

⁴In fact, Cox [1] was the first one to suggest that fragmentation of party systems in Eastern Europe can be analyzed as a coordination problem.

likely to fight against each other in the first few rounds of elections is precisely because they are unable to establish such clear expectations about entry into electoral competition, and thus unable to coordinate their decisions. The withdrawal of one of the candidates leads to a resolution of the coordination problem and the establishment of clear expectations about entry. Once such expectations are established, they become self-enforcing, and the renewal of competition is prevented. As a result, the party system stabilizes into a long-run equilibrium where a small number of established political parties dominate electoral politics. In short, party systems freeze because over time politicians learn how to coordinate their entry into electoral competition.

5 Translating Pre-existing Social Cleavages

The main contribution of the paper, however, arises not from the model itself but from thinking of the model as a micro-mechanism of translation that relates party shake-down to the politicization of social cleavages. The easiest way to see this is to return to the substantive interpretation of the model and to think of politicians 1, 2 and 3 respectively as a Social Democrat, a Christian Democrat, and an Agrarian. From this perspective, the important thing is not that a withdrawal of one candidate reduces the number of established political parties, but that such withdrawal affects the bases of political competition. In the model, while all three candidates compete, the party system has two axes of political conflict – urban-rural and secular-religious. The Social Democratic candidate scores 1 on the urban-rural dimension and 1 on the secular-clerical issue; the Christian Democratic candidate scores 1 on the urban-rural dimension and -1 on the secular-clerical dimension; and the Agrarian candidate scores -1 on the urban-rural issue and -1 on the secular-clerical dimension. Consequently, when all three candidates compete, there is a candidate on each side of each issue, and so the party system has two political oppositions that correspond to

the two underlying social cleavages. In other words, while the party system is still in flux, the translation of social cleavages into political oppositions is accurate.

Once one of the candidates withdraws, however, the number of politicized cleavages is reduced. To see how imagine, for example, that the Agrarian candidate decides to withdraw first. Should this happen, the Social Democratic candidate retains his or her scores on both issues, but the Christian Democratic candidate must adopt the centrist position on the urban-rural dimension. This is true because this candidate is now supported by a cross-cleavage coalition of urban and rural voters and so adopts the position of 0 on this issue. As a result, the Socialist and the Christian candidates continue to disagree on the secular-clerical dimension, but the urban-rural cleavage is now blurred. Thus a reduction in the number of candidates leads to a reduction in the number of political oppositions without a corresponding reduction in the number of social cleavages⁵.

There are two things to note about this result. The first thing is that the freezing of party systems diminishes the overall quality of translation. Before consolidation, a social structure with two cleavages maps into a party system with two oppositions. After consolidation, a social structure with two cleavages maps into a party system with a single opposition. Paradoxically, then, the messy period of organizational fragmentation provides a more accurate reflection of the underlying social conflicts than the subsequent period of order and stability that comes once the party system freezes. This conclusion contrasts with the occasionally expressed sentiment that the proliferation of political parties obscures the real divisions with

⁵To ground this hypothetical scenario in reality, consider the example of Poland. The country has a large farming population and an old agrarian party (PSL) that can trace its roots to the late XIX century. The recent opinion polls, however, suggest that the party is only slightly above the 5% legal threshold necessary to gain parliamentary seats. Among other things, the party faces a competition from parties that appeal to farmers on religious grounds. Should PSL be eliminated from electoral politics, Poland would continue to have a pronounced urban-rural cleavage, but this cleavage would no longer be politicized.

a country. On the contrary, if the theory proposed here is correct, then the proliferation of political parties actually reveals the true divisions quite accurately. It is only once a party system consolidates that some of these cleavages become politically muted.

The second thing to note is that the outcome of party shake-down determines which cleavages become de-politicized and which manage to retain their political salience. To see how, imagine, for example, that the Social Democratic candidate withdraws first. Should this happen, the Agrarian candidate retains his or her scores on both issues, but the Christian Democratic candidate moderates his or her stance on religion. As a result, the secular-religious cleavage becomes blurred, and the party system becomes politicized along the urban-rural dimension. As a result, depending on which candidate drops out, the axis of political competition rotates by “90 degrees:” if the Agrarian candidate drops out, the remaining politicians compete along the secular-religious cleavage, but if the Social Democratic candidate drops out, the remaining politicians compete along the urban-rural cleavage. The translation of cleavages into political oppositions is, therefore, fundamentally affected by what happens in the early rounds of electoral competition.

This conclusion has a direct implication for the significance of new party systems. As explained above, party systems in new democracies are frequently perceived as temporary periods of organizational fragmentation that lack wider theoretical significance. Indeed, the early rounds of electoral competition among a large number of poorly-organized and unstable parties are not particularly inspiring. The messy character of these elections is clearly different from the structured nature of elections in many established democracies, where long-standing and disciplined political parties compete for votes along well-defined, programmatic lines. However, the argument advanced in this paper implies that the outcomes of the messy elections in new democracies, where the long-term bases of political contestation are still up for grabs, are in a sense more consequential than electoral outcomes in established democracies, where the bases of political contestation are already well defined. In new

democracies, the early rounds of electoral competition determine not only who wins or loses a particular election, but also, and perhaps more importantly, which social cleavages will be de-politicized and which will be established as permanent bases of political conflict. As a result, party systems in new democracies should be seen as critical founding moments when political elites forge long-term, political identities that define the party system for years to come. Once those political identities are established, the party system enters into the period of “normal” politics characteristic of mature democracies.

Consider briefly how the argument developed in this section can be taken to the data. So far, the paper confined itself to brief, country-specific examples that serve as an empirical anchor or an illustration of the argument. However, the model generates a clear empirical hypothesis that can be systematically tested.

Hypothesis 1 *Over time, a decrease in the number of political parties should decrease the number of politicized cleavages.*

While a variety of data, ranging from expert opinions to surveys, can be used to test this hypothesis, an interesting and thus far un-explored way of proceeding is to analyze roll call votes cast in East European parliaments. To this end, we focus on a given country and study roll call votes from a sequence of successive parliaments (separated by elections). For each parliament, we compute NOMINATE scores (Poole and Rosenthal [10]), and use these scores to estimate the number of dimensions of political conflict in that parliament. Moreover, for each parliament we compute the number parliamentary parties. If we repeat this procedure for several East European parliaments, we obtain a panel data set that allows us to study the relationship between the number of dimensions of political conflict and the number of parliamentary parties. If the argument advanced in this paper is correct, then *ceteris paribus* as the number of parliamentary parties decreases over time, we should observe a corresponding decrease in the number of political oppositions.

6 Translating New Social Cleavages

So far the discussion focused on the translation of pre-existing social cleavages into political oppositions. We presumed that when democracy comes, a society is already characterized by a structure of social conflict, and we asked how such pre-existing divisions become established as durable axes of political contestation. Yet, as explained above, an intriguing aspect of East European democratization is that competitive elections and political parties predate the emergence of the conflict between capital and labor. This is in contrast to Western Europe where this cleavage emerged before democratization, and where it acquired a remarkable political significance. The reversal of this sequence in the case of Eastern Europe prompts us to consider not only the translation of pre-existing cleavages into political oppositions but also the politicization of new social cleavages that emerge after the party system freezes.

There are two ways in which a new social cleavage can become politicized. The first possibility is that such cleavage acquires political salience without disrupting the already frozen party system. The second possibility is that the new cleavage triggers the emergence of new political parties and thus causes a temporary thaw of the party system. A comprehensive discussion of how new cleavages can be politicized requires, therefore, that we consider both possibilities.

6.1 Politicization Under A Frozen Party System

Broadly speaking, a party systems can be regarded as frozen if the following two conditions hold. First, established political parties persist over time. If parties come and go, then the party system is in the state of flux. Second, voting patterns are stable, meaning that most voters support the same political party over a sequence of several elections. If political sympathies fluctuate widely from one election to the next, the party system is clearly not

consolidated. The following definition formally captures these two requirements.

Definition 4 *A party system is frozen if and only if (a) $\Pi_n = \Pi_{n+1}$ and (b) $c_i \in C(\pi)$ implies that $c_i^1 \in K(\pi)$ and $c_i^{-1} \in C(\pi)$.*

The first condition captures the persistence of political parties. Here Π_n is the set of political parties that exist before the new social cleavage emerges, and Π_{n+1} is the set of political parties that exist afterwards. The first condition simply means that political parties persist over time, and so the set of political parties is the same before and after the new cleavage crystallizes. The second condition captures the stability of voting patterns. Here $K(\pi)$ is the set of all clusters that vote for party π . Moreover, c_i^1 denotes all members of cluster c_i who have opinion 1 on the new issue, and c_i^{-1} denotes those members of c_i who have the opinion -1 on the new issue. The second condition states that if members of a cluster c_i voted for party π before the emergence of the new cleavage, i.e. if $c_i \in K(\pi)$, then they continue to vote for this party afterwards, and so $c_i^1 \in K(\pi)$ and $c_i^{-1} \in K(\pi)$. (See Appendix for complete notation.)

Given this definition of a frozen party system, consider the conditions that must be met if a new social cleavage is to become politicized while the party system is frozen. The following proposition has the result (See Appendix for the proof).

Proposition 3 *For a new social cleavage to become politicized under a frozen party system it is necessary that each coalition contains at least one cluster that is not partitioned by the new cleavage.*

The proposition establishes that while politicization of new social cleavages is possible, the necessary conditions are restrictive. To appreciate the force of these restrictions, consider a simple case of a democracy with a history of conflict between secular and religious movements.

Imagine that the party system in that country is already frozen, and that there are two political parties: a Christian party, sympathetic to the religious establishment and a Liberal party, favoring the secular perspective. In this case, we have two degenerate coalitions, the Christians and the Liberals, each containing a single cluster. Now imagine that a new issue, say class conflict, emerges in this society. According to the proposition, in order to become politicized while the party system is frozen, the new issue can not cut across either the Christian or the Liberal clusters. If it does, that is if either Christians, or Liberals, or both are split into workers and owners, then class conflict will not be politicized. In other words, the transformation of class conflict into a durable base of political contestation requires that the new issue leaves both clusters intact – Christians must become owners and Liberals must become laborers, or the other way around, Christians must become laborers and Liberals must become owners. Otherwise, if for example some Christians become workers and other owners, then the new class cleavage will not be politicized without a prior thaw in the party system. In this case, in fact, politicization under a frozen party system requires that the new cleavage perfectly overlaps with the old cleavage.

6.2 The Prospects of A Thaw

While a frozen party system makes the politicization of new social conflicts difficult, we have to consider the possibility that a new social cleavage triggers a temporary un-freezing of a party system. After all, a political entrepreneur can exploit the newly emergent social tensions in order to launch a new political party. Should this happen, the set of existing parties, as well as the voting patterns will change. As a result, the assumptions behind proposition 3 will not be met, and the restrictions imposed by the proposition will no longer bind. The possibility of a thaw in a frozen party system must, therefore, be studied separately. To this end, return to the model of party shake-down. Focus on any time period after one of the

candidates withdraws from electoral competition, and the party systems is already frozen. Two things must happen for the new social cleavage to become politicized via a thaw. First, a political entrepreneur must launch a new political party. In the terminology of the model, the entrepreneur must choose to compete rather than withdraw. Second, after the initial entry into electoral competition, the entrepreneur must continue to compete in order to win the war of attrition against one of the established parties.

Notice right away that according to the model, a frozen party system generates strong incentives against entry of new challengers. In order to enter, a candidate must believe that each of the two opponents competes with a probability no greater than q defined in proposition 2. Otherwise, the expected benefits of campaigning are less than the costs, and the incentives to compete disappear. Yet, as explained above, a frozen party system is characterized by a common expectation that the two established candidates are certain to compete for the rest of the game. The model suggests, therefore, that once a party system freezes, political entrepreneurs are deterred from challenging the established candidates. It follows that the re-emergence of the war of attrition among politicians is unlikely. This is precisely why a frozen party system remains frozen.

Notice, moreover, that even if a new challenger were to compete, perhaps because of informational asymmetries, that challenger would still have to win the war attrition against one of the established parties. Otherwise, if an entrepreneur competes for a while but eventually drops out, the party system re-consolidates around the old parties. As a result, after a temporary politicization, the new social conflict becomes de-politicized. Notice that according to the model, the outcome of the war of attrition is indeterminate. In fact, if we presume that once a new challenger enters, then all three politicians behave in accordance with the Nash equilibrium in mixed strategies described in proposition 2, then the new entrant has exactly $\frac{2}{3}$ change of winning and displacing one of the established candidates. In short, a victory in the war of attrition is clearly possible, it is by no means automatic, and so even

if an entry takes place and the new cleavage triggers the formation of a new political party, permanent politicization might still be illusive.

6.3 Will Class Conflict Be Politicized?

It is important to stress that the argument advanced in this section allows for the politicization of new social conflicts. New cleavages can be politicized⁶. However, politicization of such cleavages can not be taken for granted because the conditions that allow this to happen are restrictive. It is difficult to politicize a new cleavage under a frozen party system, and it is difficult to thaw such system and win the war of attrition against established parties. In the context of Eastern Europe, these difficulties imply that class conflict might not become politicized. The formation of mass political parties prior to the entrenchment of property-owning classes makes the politicization of class conflict difficult. In this important respect, therefore, the party systems in post-communist Europe are likely to differ from their West European counter parts.

Indeed, we can formulate the following hypothesis that can be tested against empirical data.

Hypothesis 2 *On average, class conflict in Eastern Europe should be less politicized than it is in Western Europe.*

An interesting way of testing this hypothesis is to perform a content analysis of electoral platforms adopted by political parties during campaigns. In so doing, we can develop a fairly direct measure of the salience of class conflict in each country. Klingemann, Hofferbert, and Budge [7], for example, have performed an extensive analysis of party platforms in Western Europe, and their methodology can be extended to Eastern Europe. Such data allow us to

⁶Note the rise of environmental parties in Western Europe (Kitschelt [5])

estimate the variance in the political salience of class conflict across these two regions. If the argument advanced in this section is correct, then *ceteris paribus* in Eastern Europe the political salience of class conflict should be relatively muted. In fact, it is worthwhile to speculate that party systems in Eastern Europe are likely to resemble the party system in the United States, where, for completely different reasons, competitive elections and political parties pre-dated the emergence of industrial capital and labor, and where the political salience of economic class is relatively low (Lipset and Marks[9]). In this particular respect, therefore, the legacy of communism may be functionally equivalent to the pre-industrial origins of US democracy.

7 Conclusion

This paper discusses party systems in the new democracies of Eastern Europe. It addresses two questions about the translation of social cleavages into political oppositions – an important aspect of current debates about parties and party systems. The first question concerns the translation of pre-existing social cleavages, and focuses on the relation between the process of translation and the evolution of new party systems. In brief, does the outcome of party shake-down affect the translation of social cleavages into political oppositions? The argument developed in this paper suggests that the answer is yes. The politicization of pre-existing cleavages hinges on which parties manage to survive the early, chaotic periods of electoral competition. An important consequence of this argument is to reassess our interpretation of new party systems. Rather than thinking of party shake-down as an uninteresting period of organizational confusion, we may want to regard it as an important founding moment that affects the long-term bases of political conflicts in new democracies.

The second question centers on the translation of new cleavages, i.e. cleavages that emerge

once a party system is already frozen. In particular, if a social cleavage emerges after a party system freezes, will it become politicized? Here, the answer is qualified. While new cleavages can be politicized, politicization is not inevitable. On the contrary, it is possible that a new cleavage will remain politically dormant. In the context of Eastern Europe, this answer implies that class conflict need not acquire the degree of political salience that it enjoys in Western Europe.

In order to think through these two issues as carefully as possible, the paper proposes a formalization of social cleavage theory and speaks to an important ambiguity in the current formulation of that theory: namely, does coalition-making affect the translation of social cleavages into political oppositions? The strong, and theoretically more elegant, version of social cleavage theory argues that the answer is no. In contrast, the weak version of the theory maintains that the answer is yes. In this context, the paper formally shows that coalition-making may lead to a de-politicization of social cleavages. Consequently, as a matter of logical consistency, we must accept the weak version of social cleavage theory. This conclusion, however, prompts us to develop an explicit micro-mechanism of translation that can clearly explain how strategic interaction among political elites affects the translation of social cleavages into political oppositions. To take a step in this direction, the paper proposes a game-theoretic model of party shake-down and uses this model to study how strategic interaction among political elites affect the politicization of social cleavages. On a more general note, by relating game-theory to social cleavage theory, the paper highlights an important affinity between the line of theory advanced by Lipset and Rokkan and the body of scholarship inspired by Duverger. In so doing, the paper hopes to take a step towards bridging the gap that occasionally separate these two intellectual traditions.

A Proof of Proposition #1

A.1 Preliminary Notation

Let $K(\pi) \subseteq C$ denote a coalition of clusters represented by party π . Keep in mind that a coalition may contain only one cluster. Moreover, let $K = \{K(\pi_1), K(\pi_2), \dots, K(\pi_m)\}$ denote any “coalition structure” that might arise if social clusters enter into coalitions.

Notice also that if there are n issue dimensions, then the maximum number of logically possible social clusters is 2^n . However, the actual number of social clusters might be less than that because some logically feasible clusters might contain too few individuals to make a political party feasible. Formally, let $C_k = \{c_1 \dots c_k\}$ be the set of social clusters that actually exist, where $k \in \{2 \dots 2^n\}$. The following proofs allow for the possibility that k is less than 2^n , i.e. that some clusters do not exist.

Notice finally that two different social clusters can not hold the same opinion on all issues. A social cluster denotes a group of individuals that hold identical opinions $o \in \{-1, 1\}$ on all issues $x \in X$. Consequently, if two clusters hold the same opinion on all issues, then all individuals within these clusters also hold the same opinion on all issues, and consequently these individuals should be grouped into a single cluster. Formally, we have that $\forall c_i$ and $c_j \in C$, $\exists x \in X$, s.t. $o(c_i, x) \neq o(c_j, x)$

A.2 The Proof

To establish this part of the proposition it is sufficient to show that there always exists a “coalition structure” that leads to a de-politicization of at least one issue. To see that this so, identify an issue $x \in X$ to be de-politicized and take the set C_k of existing clusters.

Given this set, construct pairs of two clusters such that each pair consists of two clusters that agree with each other on all issues other than x . If some clusters are not paired, then use the remaining clusters to construct pairs in such that each pair consists of two clusters that agree with each other on all issues other than issue x and one other issue. If there are still some clusters left, then construct pairs of two clusters such that the two clusters agree with each other on all issues other than issue x and two other issues. If the number of existing clusters is even, then this process will eventually pair all clusters. If the number of existing clusters is odd, then there will be one cluster. Pair that cluster with an empty set. Let $\Omega = \{\dots, (c_i, c_j) \dots, \}$ be the set of pairs of clusters so constructed. Given this set, construct any “coalition structure” such that no pair is broken.

If the number of existing clusters is even, then all pairs contain clusters that disagree on issue x . Consequently, parties that represent these cluster take the position of zero on that issue. This implies that the issue is de-politicized because a political opposition on that issue does not exist. If, on other hand, the number of existing clusters is odd, then all but one party take the position of zero on that issue. The single party that represents the pair that contains an empty set takes a non-zero position on this issue. But since no other party takes a position on the opposing side of issue x , the issue is de-politicized. It follows that given any set of existing clusters, we can always construct a “coalition structure” that de-politicizes at least one issue.

B Proof of Proposition #2

B.1 Formal Definition of the Consolidation Game

Index each election by $t \in \{0, 1, 2, \dots\}$. Let $I = \{1, 2, 3\}$ be the set of politicians. Let $A = \{f, q\}$, be the set of actions available to each politician i during each election t . Here, f stands for fighting or competing and q for quitting or withdrawing. Before each election t , politicians simultaneously decide whether to compete or withdraw. If during any period t , k politicians decide to withdraw, then $k - 1$ non-strategic automata enter the game in that period. These automata always choose to compete.

Once competition and withdrawal decisions are made, an election takes place, and the winner is announced. In particular, the winner is selected at random from players and automate who chose to compete. Thus, if there are $n > 0$ competitors, then each competitor has an $\frac{1}{n}$ chance of winning. In each period, the winner gets $s - c$, where $s > 0$ represents the spoils of office, and $c > 0$ represents the costs of campaigning. Losers get $-c$, and players who withdraw get 0. Politicians maximize the discounted sum of these per-period pay-offs with $\delta \in (0, 1)$ being the discount factor.

To define a player's strategy, let $a_t \in \times_i A$ be an action profile selected in period t , and let $v_t \in I \cup \{\emptyset\}$ be the winner of election t . (If an automaton wins, then $v_t = \emptyset$.) Let h_τ be the history of this game up to but not including period τ . A history of the game is a sequence of per-period action profiles and winners: $h_\tau = \{(a_t, v_t)\}_{t=0}^\tau$. Finally, let H_τ be the set of all such histories. Since a player's strategy specifies an action after every history of the game, a strategy σ_i for player i is a an infinite sequence of maps $\sigma_t^i : H_t \rightarrow A$. Let Γ be the consolidation game so defined.

Before proceeding with the proof note the entry of automata that always compete. This is

a purely technical assumption needed to simplify the computation of the Nash equilibrium in mixed strategies. Without it, the computation of mixed strategies requires a solution to a fourth degree polynomial or an approximation (See Fudenberg & Tirole [4] pp. 119-123).

B.2 The Proof

To establish that the strategy profile described in proposition 2 is a subgame-perfect Nash equilibrium, we have to establish that in every subgame none of the players has an incentive to deviate.

Begin with any subgame that follows a withdrawal of least one player. For that subgame, the strategy profile prescribes that players who withdraw continue to withdraw and players who competed continue to compete. Notice that following a withdrawal of at least one player, there are exactly two players competing for the rest of the game. If one player withdraws, then the remaining two players compete. If two players withdraw, then the remaining player chooses to compete, and one automaton enters who also chooses to compete. If three players withdraw, then two new automata enter, and these automata choose to compete.

Focus on any player i who chose to withdraw. Since two players are already expected to compete, by competing, player i increases the number of competitors to three and so gets the expected pay-off of $\frac{1}{3}s - c$. By withdrawing player i gets 0. Since $s < 3c$, player i has no incentives to compete. Now consider a player j who chose to compete. Since only one other player is expected to compete, by competing, player j increases the number of competitors to two and so gets the expected pay-off of $\frac{1}{2}s - c$. By withdrawing, player j gets 0. Since $s > 2c$, there is no incentive to withdraw.

Now take any subgame, where no player has withdrawn. For that subgame, the strategy profile prescribes that players compete with probability q and withdraw with probability

$1 - q$. Notice that also that since no player has quit, there are no automata in the game. In this context, for a player to mix between pure strategies, the player has to be indifferent between quitting now and quitting in the next period. By quitting now, the player gets 0 for the rest of the game. By fighting now and quitting in the next period, the player can experience one of two possibilities: (a) with probability $m = q \times q$ none of the other players quit, and the player gets $\frac{1}{3}s - c$ in this period and 0 for the rest of the game; and (b) with probability $1 - m$, at least one of his opponents quits, and the player gets $\frac{1}{1-\delta}(\frac{1}{2}s - c)$ for the rest of the game. Hence, for a mixed strategy to be an equilibrium in this subgame, it must be the case that

$$0 = m \left(\frac{1}{3}w - c \right) + (1 - m) \frac{1}{1 - \delta} \left(\frac{1}{2}w - c \right)$$

Solving for m we get

$$m = 3 \frac{w - 2c}{(1 + 2\delta)w - 6\delta c}$$

Notice that since $3c > s > 2c$, m is positive, and $q = +\sqrt{m}$. This completes the proof.

C Proofs of Proposition #3

C.1 Preliminary Notation

Let $X_n = \{x_1, x_2, \dots, x_n\}$ be the set of divisive issues that exist before the party systems freezes, and let $X_{n+1} = \{x_1, x_2, \dots, x_{n+1}\}$ be the set of divisive issues after the new issue x_{n+1} emerges. Analogously, let $C_n = \{c_1, \dots, c_i, \dots, c_{2^n}\}$ be the set of social clusters that can exist before the new social cleavage emerges, and let $C_{n+1} = \{c_1^1, c_1^{-1}, \dots, c_i^1, c_i^{-1}, \dots, c_{2^{n+1}}^1, c_{2^{n+1}}^{-1}\}$ be the set of possible clusters that can exist after the new social cleavage emerges. Here c_i^1 denotes the set of all members of cluster c_i who hold opinion 1 on the new issue, and c_i^{-1} denotes those members of c_i who hold the opinion -1 on that issue. Formally, (c_i^1, c_i^{-1})

is a partition of c_i . If members of c_i disagree on the new issue, then both c_i^1 and c_i^{-1} are non-empty. Should this happen, we say that the new cleavage is cross-cutting in the sense that it cuts through the cluster c_i . Conversely, if all members of c_i agree on the new issue, i.e. if they all take the same position, then either c_i^1 or c_i^{-1} will be empty. Finally, notice that if c_i is empty then both c_i^1 and c_i^{-1} are also empty.

C.2 The Proof

To prove the proposition, assume to the contrary that there exist at least one coalition such that all clusters are split on the new issue. Let $K(\pi, n) = \{c_1 \dots c_k\}$ be set of clusters in that coalition before the new issue emerges, and let $K(\pi, n+1) = \{c_1^1, c_1^{-1}, \dots, c_k^1, c_k^{-1}\}$ be the set of clusters in that coalition once the new issue x_{n+1} emerges. Since, all clusters are split, it follows that for every cluster that has the opinion of one on the new issue, there always exists another cluster that has the opinion of negative one on that issue. Consequently, the average opinion across all clusters in the coalition is equal to zero, and so the party takes a centrist position on the issue. As a result, the new issue is de-politicized. Thus if a new cleavage is to be politicized, then all coalitions must contain at least one cluster that is not split by the new cleavage.

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