

Democracy as an equilibrium: rational choice and formal political theory in democratization research

Milan W. Svobik

To cite this article: Milan W. Svobik (2019) Democracy as an equilibrium: rational choice and formal political theory in democratization research, *Democratization*, 26:1, 40-60, DOI: [10.1080/13510347.2018.1506768](https://doi.org/10.1080/13510347.2018.1506768)

To link to this article: <https://doi.org/10.1080/13510347.2018.1506768>



Published online: 07 Nov 2018.



Submit your article to this journal [↗](#)



View Crossmark data [↗](#)



Democracy as an equilibrium: rational choice and formal political theory in democratization research

Milan W. Svolik

Department of Political Science, Yale University, New Haven, CT, USA

ABSTRACT

Over the past quarter century, some of the most influential propositions about democratization have been developed with the tools of rational choice and formal political theory. In this article, I assess the contribution of this research paradigm to the study of democratization. Substantively, formal theorists have examined two sets of underlying mechanisms. The first conceives of elections as a solution to and a source of commitment problems; the second emphasizes the conflict-reducing properties of democratic institutions. A distinguishing feature of both mechanisms is that democracy does not emerge as an end in itself, but rather because democracy reduces political and economic transaction costs, major sources of which are asymmetries of information, commitment problems, and violence. Methodologically, formal-theoretic research contributes to the development of analytically transparent, reproducible theoretical arguments and facilitates the communication and accumulation of knowledge, both within political science and across disciplines. Finally, by demanding an explicit statement of microfoundations and by focusing on the consequences of strategic interactions, formal-theoretical research helps democratization scholars to assess external validity limitations, anticipate general equilibrium critiques, and curb the temptation to fish for statistical significance.

ARTICLE HISTORY Received 22 December 2017; Accepted 21 June 2018

KEYWORDS democratic breakdowns; hybrid regimes; electoral fraud; formal theory; rational choice

Introduction

Over the past quarter century, some of the most influential propositions about democratization have been developed with the tools of rational choice and formal political theory.¹ In *Democracy and the Market*, Przeworski proposed that in order to explain the emergence and survival of democracy, we must examine when democracy becomes a “self-enforcing equilibrium,” and he emphasized the role of repeated elections in reducing the stakes of political conflicts.² In a series of articles and a book, Kuran highlighted how “preference falsification” under dictatorship complicates the public’s coordination on anti-regime protest, thus making its success both rare and inherently unpredictable.³ By analysing the means by which dictatorships break down, Geddes showed that incentives to resist democratization differ significantly among elites in personalist, military, and single-party dictatorships.⁴ And more recently, Acemoglu and Robinson⁵ and Boix⁶ examined the implications of electoral

CONTACT Milan W. Svolik  milan.svolik@yale.edu

© 2018 Informa UK Limited, trading as Taylor & Francis Group

competition for redistribution and in turn the feasibility of democracy under varying levels of economic inequality and asset mobility.

These works exemplify the rational choice, formal-theoretic approach to the study of democratization and regime change.⁷ While differing in the degree of its technical complexity, theory-building in this research tradition is unified by two conceptual features. The first is microfoundations: rational-choice theorizing entails an explicit statement about who the key political actors are, what motivates them, and the environment in which they interact. The second feature that distinguishes rational-choice democratization research is an analysis of transitions to or from democracy as an equilibrium outcome. This conceptual criterion asks that democracy be “self-enforcing” in the sense that key actors at once anticipate the consequences of alternative political regimes and also prefer – in light of those consequences – to comply with democratic means of resolving conflicts and allocating power.

In this essay, I assess the contribution of rational choice and formal theory to the study of democratization.⁸ Key contributions to this research tradition have examined two sets of underlying mechanisms. The first of these conceives of elections as a solution to and potentially a source of commitment problems. The second class of mechanisms emphasizes the conflict-reducing properties of democratic institutions. A distinguishing feature of both sets of mechanisms is that democracy does not emerge because it is an end in itself, but rather because democracy improves on what would otherwise be a less efficient form of political or economic interactions. These inefficiencies are commonly exacerbated by asymmetries of information. Put simply, democratic institutions reduce political and economic transaction costs, major sources of which are asymmetries of information, commitment problems, and violence.

Methodologically, I argue, formal-theoretic research facilitates the development of analytically transparent and thus reproducible theoretical arguments. The reproducibility of theoretical research – just like the replication of empirical findings – is essential for the accumulation of knowledge. When arguments and mechanisms are transparent – when they can be replicated – the limits of their assumptions can be more easily assessed and their empirical implications more straightforwardly tested. While analytical transparency is in principle achievable by any kind of theorizing – formal or not – formal-theoretic research is aided in this endeavour by requiring explicit microfoundations and game-theoretic concepts for equilibrium analysis. Satisfying these requirements involves abstraction, simplification, and in that process a deliberate sacrifice of descriptive detail in favour of analytical transparency. Rather than a drawback, formal theorists view such trade-offs as a necessary aspect of theory-building and a productive step towards a better understanding of increasingly complex political settings.

This productive discipline is especially valuable in the study of democratization. Observers often highlight the fluid, informal, and uncertain nature of democratic transitions and breakdowns. In turn and in contrast to institutionalized democratic politics, students of democratization frequently disagree about fundamental questions like which actors matter, what actions they can take, or what information they have. The requirement to be explicit about one’s microfoundations thus compels us to state unambiguously which actors and interactions we consider central to the process of democratization precisely when the complexity of the subject might tempt us to remain vague. Meanwhile, the requirement that democracy be a self-enforcing equilibrium recognizes that democracy, just like any political regime, is a foundational institution. That is, when explaining the success of democracy, the equilibrium criterion asks that we

address a fundamental dilemma in the study of democratization: why would key actors comply with democratic rules of the game when there is no higher authority with the power to enforce those rules?

A further contribution of this methodological discipline to democratization research is heuristic. Analytically transparent models help us discern connections between conceptually related political mechanisms in substantively unrelated issue areas and fields. Many concepts that originated in rational choice – including concepts like collective action problems, commitment problems, costly signalling, asymmetries of information, and principle-agent problems – have by now entered the vernacular of democratization research and are widely used by even those democratization scholars who are not formal modellers or may be sceptical about the value of rational choice assumptions. This vocabulary facilitates the communication and accumulation of knowledge both within political science and across disciplines, as evidenced by the increasing exchange of ideas on democratization that takes place between economists and political scientists.

Finally, by demanding an explicit statement of microfoundations and by focusing on the consequences of strategic interactions, formal-theoretic research helps democratization scholars to curb the temptation to fish for statistical significance, anticipate general equilibrium critiques, and assess external validity limitations in empirical research. The latter concern is especially pronounced in identification-based, experimental and quasi-experimental research. Key outcomes of interest in research on democratization – like regime change, the quality of electoral competitiveness, or the functioning of political institutions – are national-level phenomena, yet we rarely encounter natural or experimental identification opportunities at that level. As a result, a major challenge to the accumulation of knowledge from identification-based democratization research is to establish external validity for highly contextual studies that tend to be executed on only a subset of the population we are ultimately interested in, and often at a much lower level of aggregation. The abstraction entailed in a statement of microfoundations compels empirical researchers to be explicit about the correspondence between a study's specific context and the more general concepts that serve as our heuristics for identifying similarities in democratization processes around the world. This remains an area of underexplored synergies between this empirical paradigm and formal theory.

Microfoundations and equilibrium analysis as tools for theory development

The rational choice approach to theory development is distinguished by its emphasis on two conceptual requirements: microfoundations and equilibrium analysis. The first of these asks that theoretical propositions be explicit about the political actors whose actions result in the phenomena analysed and the environment in which they interact. Depending on the complexity of that environment, this technically implies specifying the elements of a strategic or extensive game: the players, their actions and the order in which they are taken, the information these actors have when taking their actions, and their preferences over the possible outcomes of their interaction. In the examples cited in the opening paragraph of this article, such actors include ordinary citizens, authoritarian elites, social classes, and parties contesting elections; their actions include participating or not in an anti-regime protest, introducing elections or maintaining authoritarian rule, and complying or not with the outcomes of elections.

The second conceptual requirement that distinguishes the rational choice approach to theory development is an analysis of democratization as a “self-enforcing” equilibrium outcome. In an early, prominent statement of this criterion, Przeworski argued that “democracy is consolidated when it becomes self-enforcing, that is, when all the relevant political forces find it best to continue to submit their interests and values to the uncertain interplay of the institutions.”⁹ In a similar spirit, Weingast proposed that “[democracy] becomes self-enforcing when citizens hold [democratic principles] in high enough esteem that they are willing to defend them by withdrawing support from the sovereign when he attempts to violate these limits.”¹⁰

Put more generally, the equilibrium criterion asks that democracy be “self-enforcing” in the sense that key actors anticipate the consequences of alternative political regimes for both their own and others’ welfare and prefer – in light of those consequences – to comply with democratic means of resolving conflicts and allocating power. Technically, therefore, compliance with democracy must constitute an equilibrium, typically the Nash equilibrium or one of its refinements. At a minimum, these equilibrium concepts require that no relevant actor have a unilateral incentive to deviate from democracy.

The requirement that democracy be a self-enforcing equilibrium builds on the recognition that democracy, just like any political regime, is a foundational institution: there is no higher, independent authority with the power to enforce compliance with the democratic rules of the game.¹¹ One of the earliest applications of this reasoning to foundational institutions is North and Weingast’s analysis of the emergence of checks and balances in seventeenth century England.¹² North and Weingast stipulate that constitutions “must be self-enforcing in the sense that the major parties to the bargain must have an incentive to abide by the bargain after it is made.”¹³

An equilibrium analysis of democratization therefore consists of two analytical steps: first, an examination of the consequences of alternative political systems for key actors’ welfare, and then in light of those consequences, an analysis of the conditions under which key actors prefer democracy to those alternative political systems. The study of democratization thus requires an analytically more complete perspective on institutions than the more common analysis of the equilibrium consequences of institutions alone.¹⁴ In the latter instance, as in Cox’s study of the consequences of electoral systems for coordination by voters and parties, we can productively bracket the question of why parties would comply with electoral rules in the first place.¹⁵ In the study of democratization, such a “partial equilibrium” analysis would sidestep a key dilemma. As Przeworski puts it, “democracy generates winners and losers ... why would [losers] not seek to subvert the system that generates such results?”¹⁶

Explaining why compliance with democratic rules of the game constitutes an equilibrium thus becomes a key analytical step. Compliance may be problematic during the transition to democracy – as when former authoritarian elites have to relinquish power to new democratic elites – and also during the course of electoral competition in an already existing democracy – as when the losers of an election have to concede their defeat. The analysis of when compliance with democracy is self-enforcing thus highlights that the study of transitions to democracy, the breakdown of democracy, and authoritarian stability are all unified by the same conceptual problem. In the study of democratic breakdowns, non-compliance may take the form of a military coup,¹⁷ manipulated elections,¹⁸ or the refusal by a candidate or party to concede an electoral defeat.¹⁹ The complementary analysis of authoritarian stability considers when

protest²⁰ and the attendant failure of repression,²¹ or elite conflicts²² destabilize a dictatorship enough to create an opportunity for democratization.

The complexity of the formal, mathematical statements of both the microfoundations and equilibrium analysis separates two generations of models of democratization. The first, so-called “soft” rational choice generation is exemplified by Geddes, Kuran, North and Weingast, Olson, and Przeworski.²³ This generation of rational choice democratization research relied primarily on an intuitive, non-formal presentation of microfoundations as well as equilibrium predictions, often employing simple extensive form game trees and two-by-two game matrices.

While some democratization research that preceded this generation of models did employ the language of “players,” “games,” and “strategy,” these terms were used as metaphors rather than analytical concepts guiding theory development. For instance, some of the first pleas to focus less on structure and more on agency in explaining transitions to democracy can be traced to O'Donnell and Schmitter's *Transitions from Authoritarian Rule*.²⁴ Yet, O'Donnell and Schmitter's usage of terms like agency, strategic interaction, and game is mostly metaphorical, as when these authors speak of “strategic contexts”, “multilayered chess games”, and eventually conclude that transitions to democracy are inherently unpredictable due to the complexity, uncertainty, and reversibility involved.²⁵

Similarly, Dahl argued that transitions to democracy occur when “the costs of suppression exceed the costs of toleration,”²⁶ while Di Palma and Linz and Stepan characterized democratic consolidation as a process during which democracy becomes “the only game in town.”²⁷ This vocabulary, while evocative, was also employed primarily metaphorically. These authors did not propose the microfoundations that would allow us to identify the circumstances under which “the costs of suppression exceed the costs of toleration” and democracy becomes “the only game in town.”

By contrast, the contemporaneously emerging rational choice study of democratization employed game theoretic concepts as tools in and criteria for theory development. Rather than metaphors, terms like “players” and “games” became elements of a conceptual apparatus with clear requirements for establishing microfoundations and deriving equilibrium predictions. In this line of research, an analysis of when democracy becomes (or fails to become) “the only game in town” amounts to an explicit statement of the conditions under which both key actors' behaviour and the political institutions that govern it are self-enforcing. As this research programme advanced, the “soft” rational choice generation of models was replaced by a second generation of contemporary models that are explicitly mathematical. As I discuss below, a downside of this increase in rigour are the greater technical barriers that most contemporary models present to those political scientists who lack training in formal theory.

The mechanisms

Formal models of democratization have analytically focused on two broad classes of mechanisms. The first of these conceives of elections as a solution to and a source of commitment problems; the second emphasizes the conflict-reducing properties of democratic institutions. In each of these mechanisms, democracy is not an end in its own right, but rather an institutional improvement on what would otherwise be a more costly, possibly violent form of political interaction. Put differently, elections reduce political transaction costs, a major source of which are commitment problems

and violence. Both are exacerbated by asymmetries of information. These transaction costs arise because, as we discussed earlier, political regimes are foundational institutions – their functioning and stability cannot rely for enforcement on some higher, independent authority. In turn, commitment problems abound and political conflicts may be resolved by violence.

Democracy and commitment problems

In a large number of models, democratic institutions – especially elections and the separation of powers – resolve commitment problems. In an early, “soft” rational choice contribution to this line of inquiry, North and Weingast identified commitment problems in the enforcement of property rights as a major impediment to economic development.²⁸ For economic growth to occur, North and Weingast argued, governments “must not merely establish the relevant set of rights, but must make a credible commitment to them.”²⁹ Such commitments may become problematic when governments take advantage of their coercive capacity and raise revenue by expropriating property or reneging on debt, typically under the pressures of a fiscal crisis or war.³⁰

North and Weingast credit the emergence of parliamentary supremacy in England in the aftermath of the Glorious Revolution with engendering such credible commitment. Once the Parliament, and indirectly the wealth holders that it represented, gained a veto over the Crown’s fiscal policy and demonstrated its ability to dethrone a sovereign who stepped out of line, England also gained more secure property rights. The constitutional changes that emerged in 1688 included parliamentary assent to major policy changes, new legislation, and judicial appointments – constitutional provisions that we recognize today as “checks and balances.”

The contemporary treatment of commitment problems is exemplified by Acemoglu and Robinson’s and Boix’s models of democratization. A starting point for these models is a dictatorship in which power is controlled by the rich who are facing a demand for the redistribution of wealth by the poor. This demand is backed by the threat of a violent revolution that, if successful, would expropriate the rich and redistribute their wealth among the poor. Crucially, this threat is transient as the poor are able to mobilize on only a temporary basis (for example, due to collective action problems.) The rich can attempt to appease the poor by adopting redistributive policies but such policies may not be credible: the rich would prefer to reverse any redistributive policies as soon as the revolutionary threat by the poor subsides.³¹

A transition from a dictatorship to democracy, by contrast, may both redistribute wealth and provide a credible commitment to it. The first part of this claim builds on the implications of the Hotelling-Downs model of electoral competition for redistributive politics: a transition to democracy is in effect a shift in political power to the median voter who is much poorer than the rich elites who govern under a dictatorship. Candidate platforms under democracy therefore entail some redistribution of wealth, the intensity of which depends on a society’s level of economic inequality.³² Acemoglu and Robinson argue that implementing redistribution via democratization is more credible than policies alone because it is harder for the rich to dismantle the institutional infrastructure that emerges in the process of a transition to democracy than to reverse policies.³³

Democratic institutions also generate commitment problems of their own. Most prominent of these is the compliance of the losers of elections with their outcomes. As

Przeworski put it, “democracy generates winners and losers, can one ever expect the losers to comply with the verdict of democratically processed conflicts?”³⁴ Depending on the context, the relevant losers are either the candidates or parties that anticipate losing or have lost an election or, more broadly, the social or economic interests that tend to lose out under democracy compared to dictatorship.³⁵ The latter commitment problem figures prominently in Acemoglu and Robinson’s and Boix’s framework and was anticipated by Przeworski when he wrote “if some important political forces have no chance to win distributional conflicts and if democracy does not improve the material conditions of losers, those who expect to suffer continued deprivation under democratic institutions will turn against them.”

Compliance with the outcomes of elections by candidates or parties, meanwhile, is the focus of a growing number of models of electoral fraud and manipulation. In an early analysis of this commitment problem, Przeworski emphasized the intertemporal nature of elections:

Democratic institutions render an intertemporal character to political conflicts ... [they] offer to the relevant political forces a prospect of eventually advancing their interests that is sufficient to incite them to comply with immediately unfavourable outcomes. Political forces comply with present defeats because they believe that the institutional framework that organizes the democratic competition will permit them to advance their interests in the future.³⁶

Put differently, regularly held elections turn what could otherwise be a permanent defeat into a temporary one, thus reducing the costs of compliance with any single electoral defeat.³⁷

Models of electoral fraud and manipulation approach the problem of losers’ compliance with the outcomes of elections by shifting focus from the question of whether elections are held to how fairly they are conducted.³⁸ In these models, an incumbent that anticipates an electoral defeat may engage in pre-election manipulation or election-day fraud. Meanwhile, a defeated opposition may attempt to reverse the outcome of elections by engaging in a protest or rebellion and its ability to do so may be compromised by collective action problems in the organization of protests.³⁹

This difference in the actions available to the incumbent and the opposition reflects a structural advantage that incumbents possess by virtue of their greater control over the state apparatus and electoral administration. It also highlights that the problem of compliance with the outcomes of elections may be just as pronounced for the winners of elections as it is for their losers. To rephrase Przeworski: democracy generates winners and losers; can one ever expect winners to refrain from exploiting their position in order to rig the next election in their favour? By addressing this commitment problem, models of electoral fraud and manipulation provide microfoundations for the process of democratic backsliding and a class of regimes that democratization scholars refer to as hybrid, competitive authoritarian, or electoral authoritarian.⁴⁰

Elections as a conflict-processing mechanism

Power can be allocated in two fundamentally different ways: by violence or by institutions. Models of democratization that focus on the conflict-processing role of democratic institutions emphasize two aspects of elections: First, elections represent a less costly method for resolving political conflicts than outright violence; second, elections aggregate information that may render violence unnecessary in the first place.

Violence is a costly and therefore inefficient method for allocating power. Building on this observation, Chernykh and Svolik and Przeworski et al. focus on when key political actors prefer the outcome of free and fair elections to the alternative of protest, rebellion, or outright war.⁴¹ Chernykh and Svolik, for instance, highlight that the tacit threat of a violent post-election confrontation generates self-enforcing compliance with the outcomes of elections – but only when differences in the popularity of the competing parties are large. By contrast, even minor asymmetries of information may result in post-election violence when elections are close: the losing candidate might – possibly incorrectly – believe that he was denied a victory by manipulation or simple chance and attempt to reverse the outcome by fighting. According to this class of models, democracy is self-enforcing when all competing parties prefer the outcome of elections to the costly, violent confrontation that may otherwise ensue.

In a related class of models, democratic institutions prevent political conflicts from escalating into violence by alleviating asymmetries of information.⁴² Depending on the context, the relevant informational asymmetry may be between the incumbent and the challenger or between an opportunistic incumbent and a mass of atomistic citizens. In the former case, as in some of the models discussed in the preceding paragraph, elections make it clearer (and possibly common knowledge) who would prevail if conflicts were to be resolved by violence.⁴³ In this vein, Chernykh and Svolik, Hyde and Marinov, and Luo and Rozenas examine the informational role of third parties: electoral observers, commissions, and courts. By reducing informational asymmetries, these actors preclude unnecessary violence while simultaneously amplifying its deterrent effect.⁴⁴

Meanwhile, models that focus on the interaction between an opportunistic, possibly authoritarian incumbent and the citizenry emphasize that elections aggregate dispersed private information, typically about the popularity of an authoritarian incumbent versus a pro-democratic opposition. Beginning with Kuran, Lohmann, and Weingast, a prominent focus in this line of research has been an analysis of the challenges that asymmetries of information present for pro-democratic collective action.⁴⁵ In these models, pro-democratic protests fail not because they lack support among the population, but rather because informationally isolated individuals are not aware how sizeable that support is.

Asymmetries of information also play a central role in accountability-based models of democratization. In these models, the major difference between dictatorship and democracy is that, in the latter, electoral competition affords the public an opportunity to hold politicians accountable for their performance in office. In turn, democratic elections generate incentives for politicians to promote the general welfare, compared to the much narrower “selectorate” that is favoured under dictatorship.⁴⁶ Fearon, for instance, models a population that may attempt to hold the incumbent accountable by staging a protest, but doing so is riddled with collective action problems because citizens are unaware of each other’s level of dissatisfaction with the government. Democratic elections help resolve such collective action problems by aggregating and publicizing dispersed private information about the government’s support, thus turning it into common knowledge.

Democracy survives in accountability-based models of democratization when it outperforms a dictatorship.⁴⁷ Only then can voters be realistically expected to defend democracy against politicians or groups with authoritarian ambitions. In the models of Myerson, Bidner and Francois, Meirowitz and Tucker, and Svolik, for instance,

elections may fail to deliver accountability when voters come to believe that most politicians are self-serving and any attempt to discriminate among them based on their performance is therefore a waste of effort.⁴⁸ When espoused by a sizeable fraction of the electorate, such expectations are self-fulfilling: they fuel a mutually reinforcing cycle of voter apathy and poor government performance. According to this class of models, a key threat to democratic stability is not a redistributive conflict but rather the failure of elections as an instrument of accountability.

Productive discipline: formal models and the accumulation of knowledge

The rational choice approach to the study of democratization contributes to the production and accumulation of knowledge in three key ways. First, by requiring an explicit statement of microfoundations and by employing explicit criteria for equilibrium analysis, formal modelling as a method for theory development facilitates the reproducibility of theoretical arguments. The second, related contribution of rational choice theorizing is heuristic. Analytical transparency facilitates the communication of knowledge across substantively unrelated subjects and even disciplines. Finally, by emphasizing the consequences of individual incentives and strategic interactions, formal-theoretic research helps empirically-focused democratization scholars anticipate potential identification problems, interpret their findings, and assess external validity limitations.

Analytical transparency and replication in theoretical research

Formal exposition – not necessarily rational choice-based one – allows for a more straightforward replication of theoretical arguments and mechanisms than its natural language counterpart. While it is commonly emphasized that the replication of empirical findings is essential for the accumulation of knowledge, the reproducibility of theoretical arguments has received much less attention. Yet, the rationale for theoretical replication is closely related: it is only when we are able to understand the assumptions and logical connections in a theoretical argument – when we are able to replicate it – that we can appreciate its explanatory potential and limitations, recognize its empirical implications and test them, and build on what we have learned in that process.

Formal-theorists are aided in the production of analytically transparent explanations by the requirement that they be explicit about their microfoundations and how these translate into equilibrium predictions. These requirements are especially useful in the study of democratization and authoritarian politics. Unlike in the context of democratic politics or formal institutions, common points of contention include which actors matter in the process of democratization, what their relevant actions are, or what information they have. This is partly due to the fluid, informal, and uncertain nature of democratic transitions and breakdowns,⁴⁹ and partly due to the multi-faceted nature of the subject: The study of democratization entails topics as diverse as the introduction of franchise, military coups, media manipulation, and the survival of post-authoritarian parties, to name just a few. Microfoundations thus lie at the heart of theorizing about democratization.

The requirement to be explicit about one's microfoundations in turn amounts to productive discipline: it compels a theorist to state unambiguously which political actors and interactions they consider central to the process of democratization. This

necessarily entails simplification, abstraction, and thus ultimately a trade-off of descriptive realism in favour of analytical clarity.⁵⁰ The attendant potential for oversimplification has been a frequent point of criticism of rational choice and formal theory. Yet, productive theories – formal or not – approach the trade-off between descriptive realism and analytical clarity with a strong preference for the latter. This is not out of ignorance of the complexities of real-world politics. Rather, it is precisely because tractable, even if simple, models help us to understand politics better than nuanced but inscrutable ones. Put bluntly, analytical clarity trumps descriptive richness. This emphasis implies a process of theory-building that views the analysis of simple, tractable models that deliberately discard any detail not relevant to the political intuition under consideration as a productive step towards the understanding of more complex settings.

A cumulative benefit of analytical transparency is that, as a field, we waste less time deciphering the assumptions and mechanisms behind specific claims and can instead move more straightforwardly to their substantive and empirical evaluation. Consider again Acemoglu and Robinson's and Boix's models of democratization. Within a decade since their publication, these authors' arguments about the role of redistributive demands in transitions to democracy have been vigorously tested – and we now know that empirical support for them is at best mixed.⁵¹ Meanwhile, others extended these models to contexts not anticipated by their originators.⁵² This is in great part due to these authors' transparency about their microfoundations and how these translate into equilibrium empirical predictions about the feasibility of democracy at varying levels of inequality.

By contrast, evaluations of less transparent arguments are often bogged down by disagreements about “what the author meant,” “assumed,” and how those assumptions translate into conclusions. Consider modernization theory. Generations of democratization scholars have debated what precisely democratization scholars from Lipset to Dahl to Huntington meant by “the middle class”,⁵³ and what assumptions are needed to conclude – just like Moore did – that “no bourgeois” implies “no democracy.”⁵⁴

My emphasis on the analytical clarity of formal theory may appear misplaced in light of another of its frequent criticisms: that formal-theoretic research is increasingly mathematically complex, thus undermining its own claim to transparency and tractability. Just like inscrutable natural language exposition, excessively complicated mathematical exposition is an obstacle to analytical transparency and may unnecessarily narrow one's potential audience. Whether greater mathematical sophistication is warranted or presents an undue barrier should therefore be evaluated with this trade-off in mind, implying a preference for the simplest model capable of delivering the same insight.

Consider, for instance, the rational-choice treatment of collective action problems in democratization. This research agenda has moved from the first-generation of non-technical and highly influential models of Kuran, Geddes, and Weingast to the increasingly technical, global game-style models of Bueno de Mesquita, Little, Shadmehr and Bernhardt, and Rundlett and Svulik.⁵⁵ A key advantage of the latter are unique, intuitive equilibrium predictions for a subset of collective actions problems that exhibit a multiplicity of equilibria and hence ambiguous empirical predictions when approached with traditional techniques. Maybe counterintuitively, global game-style models of collective action may therefore be especially relevant for empirically-minded democratization scholars.

Heuristic transparency and the accumulation of knowledge

The analytical transparency of model-based theorizing contributes to heuristic transparency in democratization research broadly: it makes it easier to draw and communicate connections between conceptually related mechanisms in democratization and other, substantively unrelated fields. Consider commitment problems. As I discussed earlier, a large number of models conceive of democratic institutions as a solution to commitment problems that would otherwise frustrate political or economic interactions. One reason for the prevalence of commitment problems in the context of democratization is that political systems are foundational institutions that cannot rely for the enforcement of commitments on some higher, independent authority. This observation clarifies the conceptual connection between the study of democratization and international relations, where – just like in the study of political regimes – we cannot reasonably assume the presence of such an authority. Indeed, Schelling's pioneering analysis of commitment and bargaining problems, which predates the analysis of commitment problems in democratization research by at least two decades, was motivated by concerns about the credibility of the United States' commitment to defend its allies during the Cold War.⁵⁶ Schelling's and his successors' models of commitment problems⁵⁷ allow us to see the conceptual parallels – and thus learn from – subjects as varied as authoritarian politics, clientelism, constitutional design, international trade, civil wars, and the rule of law.

Analytical transparency thus facilitates heuristic transparency and, in turn, the communication and accumulation of knowledge. As further evidence of this, consider the large number of concepts that originated in rational-choice research outside of the study of democratization but have by now become part of its analytical vocabulary. Terms like the prisoner's dilemma, stag hunt, collective action problem, commitment problem, costly signalling, asymmetry of information, or principle-agent problem – to name just a few – are now productively used as heuristic summaries by even those democratization scholars who are not formal modellers or may be sceptical about the value of rational choice assumptions.

This shared analytical language has accelerated the cross-disciplinary dialogue that increasingly takes place between political scientists and economists. This article is one indicator: more than one-fourth of the works that I cite were published by either professional economists or in economics journals. The study of democratization is better for this interdisciplinary exchange. Contrast this with the disappearing communication between political science and sociology – and this is in spite of the fact that in the 1950s and 1960s, political sociologists like Lipset and Moore authored some of the classics in the study of democratization.⁵⁸

Complementarities between theoretical and empirical research

I conclude by highlighting the complementarities between theoretical and empirical research on democratization. When discussing the latter, I focus on identification-based, experimental and quasi-experimental research. This is in part because the synergies between formal theory and large-N⁵⁹ and qualitative⁶⁰ research have been examined by others and most of my arguments below extend to these empirical strategies. More importantly, identification-based empirical research tends to be less theoretically grounded than large-N or qualitative research and often proudly so – claiming to rely

less on assumptions by letting the data to “speak for itself.” By contrast, I suggest that a close interaction with an explicitly, not necessarily formally stated theory contributes to identification-based empirical research in a number of ways: by curbing the temptation to fish for statistical significance, by highlighting potential general equilibrium challenges to experimental designs, and by providing a framework for the assessment of external validity concerns.⁶¹

Concerns over the external validity of identification-based empirical research are especially pronounced in the context of democratization. Key outcomes of interest in the research on democratization – like regime change, the quality of electoral competitiveness, or the functioning of key political institutions – are macro-political phenomena and, when most politically consequential, national-level phenomena. Yet, we rarely encounter credible identification opportunities, like natural experiments, at the national level and are almost never able to conduct actual experiments at that level. Instead, most experimental and quasi-experimental studies of democratization are implemented either at the level of individuals (for example, lab or survey experiments) or small communities (for example, village-level accountability or civic educational field experiments.)

As a result, most identification-based research examines cases or samples that are only a small, often unrepresentative subset of the population that we are ultimately interested in and typically at a much lower level of aggregation. An assessment of whether and how particular experimental findings contribute to our understanding of democratization in turn rests heavily on arguments about which features of a study’s context are idiosyncratic and which generalize to the ultimate population of interest. An explicit statement of the microfoundations behind a research design allows for a more transparent statement of the assumptions on which the soundness of extrapolations from any single empirical study should be evaluated.

An added benefit may be reduced incentives for data fishing: Since an explicit statement of microfoundations and their empirical implications is a non-trivial undertaking, the results of such an analysis can serve as a pre-commitment to a specific course of empirical investigation and in turn disincentivize ex-post fishing for and reporting of only those findings that happen to be statistically significant.

An explicit theoretical framework also helps to clearly establish the political parameters that an experimental manipulation is supposed to manipulate and estimate. In practice, empirical researchers devote most of their efforts to the estimation of treatment effects – which are statistical objects – and less time to the analysis and discussion of the ultimate objects of interest: the political parameters responsible for those treatment effects. Explicit microfoundations facilitate the latter task by clarifying the mapping between the key political parameters behind the mechanism being evaluated, the equilibrium comparative static predictions implied by those parameters, and the estimated treatment effects. An explicit equilibrium analysis, meanwhile, may help us anticipate “general” equilibrium responses to experimental manipulations that cannot be controlled for, but may be measurable, within the “local” context of most experiments.

Consider field experiments on electoral accountability in new democracies and electoral authoritarian regimes. In this research agenda, interventions often entail informational treatments about politicians’ performance – scorecards, ads, community meetings – but are rarely explicit about how these treatments map onto our frameworks for how electoral accountability works. Depending on the specific implementation, such informational treatments may correspond to a change in the precision of private signals about the incumbent’s performance, generate common knowledge about the

incumbent's performance, reduce the cost of acquiring information about specific candidates, or substitute for the candidates' campaign effort. Depending on the political context, these treatments may be thought of as manipulating parameters within standard models of electoral accountability⁶² or within the less well understood context of accountability under electoral authoritarianism. In the latter case, informational treatments may be alternatively interpreted as reducing informational distortions or barriers to competition that arise due to the vast repertoire of manipulation that incumbents in electoral authoritarian regimes engage in.

Conclusion

I conclude by discussing some limitations of formal-theoretic research on democratization. First, there are several subjects that have been underexplored in this research paradigm in spite of their conceptual prominence. Consider civil liberties – a key element in most definitions of democracy. In virtually all formal models, democracy amounts to either fair electoral competition or, less often, the separation of powers. We currently lack models that would examine either the equilibrium emergence or consequences of civil liberties. A similar point applies to civic culture – a central concept in the study of democratization and political behaviour. Formal modellers seldom study the emergence or the implications of non-instrumental support for democracy among the elites or the general public.

A second shortcoming I see is that the mechanisms modelled by formal theorists are often presented at levels of abstraction and generality so high as to be effectively ahistorical, with only rare attempts to contextualize them historically. This limits formal theorists' ability to address the big-picture, *longue durée* questions that motivate a lot of democratization research: why is it only in the last two hundred years that representative democracy emerged, why in the West rather than the East, and why is it only recently that democracy became the dominant form of political organization?

Finally, this review, as well as most of other literature, has treated formal theory and the rational choice paradigm as coterminous. Yet, there is no reason why this needs to be so. In fact, a formal exploration of the many mechanisms from political psychology and behavioural economics – attribution bias, confirmation bias, motivated reasoning, time-inconsistency, prospect theory – may prove productive in democratization research.⁶³ For instance, while we may reasonably think of political elites as strategic and information-seeking, the masses may be more realistically conceived of as non-strategic, (non-rationally) information-ignorant, or biased in their information processing (relative to a Bayesian benchmark.) Such behavioural direction may be especially promising in the study of democratic backsliding and electoral authoritarianism. In a number of prominent cases – Russia, Turkey, Venezuela – incumbents have subverted democracy while enjoying significant popular support. The basis for this support appears to be the ability of these incumbents to get credit for economic outcomes that a rational, informed voter should attribute to fortuitous circumstances rather than the skills or efforts of these incumbents.

Notes

1. As of September 2017, the publications referenced in this paragraph have been cited, according to Google Scholar, more than 20,000 times.

2. Earlier outlines of these arguments are apparent in Przeworski, "Some Problems in the Study of the Transition to Democracy", the first draft of which appeared in 1979.
3. Kuran, "Sparks and Prairie Fires: A Theory of Unanticipated Political Revolution"; Kuran, "The East European Revolution of 1989"; Kuran, "Now Out of Never"; Kuran, *Private Truths, Public Lies*.
4. Geddes, "Authoritarian Breakdown"; Geddes, "What do we Know about Democratization after Twenty Years?"; Geddes, *Paradigms and Sand Castles*.
5. Acemoglu and Robinson, "A Theory of Political Transitions"; Acemoglu and Robinson, *Economic Origins of Dictatorship and Democracy*.
6. Boix, *Democracy and Redistribution*.
7. For an introductory treatment of formal models of democratization, see Chapter 8 in Gehlbach, *Formal Models of Domestic Politics*.
8. See Chapter 6 in Coppedge, *Democratization and Research Methods* for another assessment of this research agenda. In a related set of articles, Gehlbach et al., "Formal Models of Non-democratic Politics," review the role of formal theory in research on authoritarian politics; Little and Pepinsky, "Simple and Formal Models of Comparative Politics," discuss the role of formal modelling in comparative politics broadly. For a general discussion of the value and limits of applied game theory in political science, see, Chapter 5 in Geddes, *Paradigms and Sand Castles*, Green and Shapiro, *Pathologies of Rational Choice Theory*, Morton, *Methods and Models*, and Clarke and Primo, *A Model Discipline*.
9. Przeworski, *Democracy and the Market*, 26.
10. Weingast, "The Political Foundations of Democracy and the Rule of Law," 251.
11. As Hardin emphasized, this foundational nature of political regimes contradicts the common conception of constitutions as contracts: "A constitution is not a contract, indeed it creates the institution of contracting. Hence, again, its function is to resolve a problem that is prior to contracting." See Hardin, "Why a Constitution?," 101.
12. North and Weingast, "Constitutions and Commitment."
13. Ibid. 806. James Madison must have understood the foundational nature of constitutional provisions and the resulting commitment problems when he wrote in Federalist No.51, "In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place, oblige it to control itself."
14. For a discussion of this distinction, see Riker, "Implications from the Disequilibrium of Majority Rule for the Study of Institutions"; Shepsle, "Institutional Equilibrium and Equilibrium Institutions"; Shepsle, "Rational Choice Institutionalism"; Calvert, "Rational Actors, Equilibrium, and Social Institutions"; Weingast, "Political Institutions: Rational Choice Perspectives."
15. Cox, *Making Votes Count*.
16. Przeworski, *Democracy and the Market*, 18–19.
17. Acemoglu and Robinson. *Economic Origins of Dictatorship and Democracy*; Acemoglu et al., "A Theory of Military Dictatorships"; Svobik, "Contracting on Violence."
18. Chernykh and Svobik, "Third-Party Actors and the Success of Democracy"; Gehlbach and Simpser, "Electoral Manipulation as Bureaucratic Control"; Rozenas, Arturas, "Office Insecurity and Electoral Manipulation"; Rundlett and Svobik, "Deliver the Vote!"; Simpser, *Why Governments and Parties Manipulate Elections*.
19. Przeworski, *Democracy and the Market*; Przeworski et al., "Elections under the Shadow of Force"; Svobik, "Elections in the Shadow of Force."
20. Bueno de Mesquita, "Regime change and revolutionary entrepreneurs"; Castaneda et al., "Collective Action and Representation in Autocracies: Evidence from Russia's Great Reforms"; Edmond, "Information Manipulation, Coordination, and Regime Change"; Hollyer et al., "Transparency, Protest and Democratic Stability"; Little et al., "Elections, Protest, and Alternation of Power"; Tyson and Smith. "Dual-Layered Coordination and Political Instability."
21. Casper and Tyson, "Popular Protest and Elite Coordination in a Coup d'État"; Dragu and Przeworski, "Preventive Repression"; Dragu and Lupu, "Collective Action and Constraints on Repression at the Endgame"; Shadmehr, "Mobilization, Repression, and Revolution"; Siegel, "When Does Repression Work?"; Svobik, "Contracting on Violence."
22. Ansell and Samuels, *Inequality and Democratization*; Boix and Svobik. "The Foundations of Limited Authoritarian Government"; Cox, "Authoritarian Elections and Leadership

- Succession"; Gay and Albertus, "Unlikely Democrats"; Geddes, "Authoritarian Breakdown"; Lizzeri, "Why Did the Elites Extend the Suffrage?"; Svulik, "Power-sharing and Leadership Dynamics in Authoritarian Regimes."
23. Olson, "Dictatorship, Democracy, and Development."
 24. O'Donnell and Schmitter, *Transitions from Authoritarian Rule*.
 25. *Ibid*, 26, 83.
 26. Dahl, *Polyarchy*, 15.
 27. Di Palma, *To Craft Democracies*, 113; Linz and Stepan, *Problems of Democratic Transition and Consolidation*, 5.
 28. North and Weingast, "Constitutions and Commitment."
 29. *Ibid*, 803.
 30. For more recent contributions in this tradition, see Ansell and Samuels, *Inequality and Democratization*; Gay and Albertus, "Unlikely Democrats"; Gehlbach and Keefer, "Investment without Democracy"; Stasavage, *Public Debt and the Birth of the Democratic State*.
 31. This commitment problem plays a central role in Acemoglu and Robinson's framework. Boix emphasizes a different commitment problem: the inability of the poor to commit to limit the extent of redistribution after democracy is introduced.
 32. Meltzer and Richards, "A Rational Theory of the Size of Government."
 33. For an analysis of wartime mobilization as an alternative commitment device, see Ticchi and Vindigni, "War and Endogenous Democracy."
 34. Przeworski, Adam, *Democracy and the Market*, 18; North and Weingast, "Constitutions and Commitment," discuss a related commitment problem associated with the English Parliament's constitutional ascendance in the aftermath of the Glorious Revolution: why would the Parliament not proceed to act just like the king used to? (817).
 35. A distinct set of commitment problems emerges in the context of transitional justice and concerns the credibility of promises of amnesty made to former authoritarian elites in exchange for relinquishing power; see Nalepa, *Skeletons in the Closet*.
 36. Przeworski, Adam, *Democracy and the Market*, 19.
 37. See also Bidner et al., "A Theory of Minimalist Democracy"; Przeworski et al., "Elections under the Shadow of Force."
 38. Chernykh and Svulik, "Third-Party Actors and the Success of Democracy"; Egorov and Sonin, "Elections in Non-Democracies"; Gehlbach and Simpser, "Electoral Manipulation as Bureaucratic Control"; Guriev and Treisman, "How Modern Dictators Survive"; Little, "Elections, Fraud, and Election Monitoring in the Shadow of Revolution"; Little, "Are Non-competitive Elections Good for Citizens?"; Luo and Rozenas, "The Election Monitor's Curse"; Magaloni, "The Game of Electoral Fraud and the Ousting of Authoritarian Rule"; Miller, Michael K. "Electoral Authoritarianism and Democracy"; Rozenas, "Office Insecurity and Electoral Manipulation"; Rundlett and Svulik, "Deliver the Vote!"; Simpser, *Why Governments and Parties Manipulate Elections*.
 39. On the role of collective action problems in post-election protests, see Little, "Elections, Fraud, and Election Monitoring in the Shadow of Revolution"; Little et al., "Elections, Protest, and Alternation of Power"; Tucker, "Enough!" Fearon and Tucker discuss the focal properties of elections and electoral fraud and relate these to collective action problems in pro-democratic protests; see Fearon, "Self-enforcing Democracy"; Tucker, "Enough!"
 40. Waldner and Lust, "Unwelcome Change"; Svulik, "When Polarization Trumps Civic Virtue"; Levitsky and Way, *Competitive Authoritarianism*; Schedler, *The Politics of Uncertainty*.
 41. Chernykh and Svulik, "Third-Party Actors and the Success of Democracy"; Przeworski et al., "Elections under the Shadow of Force."
 42. Asymmetries of information also play a central role in models of "authoritarian liberalization." These models are inspired by Przeworski's analysis of when a conflict between soft-liners and hard-liners within an authoritarian regime generates a potential democratic opening. See Casper and Taylor, *Negotiating Democracy*; Crescenzi, "Violence and Uncertainty in Transitions"; Chapter 2 in Przeworski, *Democracy and the Market*; and the discussion in Coppedge, *Democratization and Research Methods*, who refers to these as "positional models."
 43. A related rationale – to reduce the risk of a leader's violent removal from office – appears in models of quasi-democratic institutions under dictatorship; see Boix and Svulik, "The Foundations of Limited Authoritarian Government"; Cox, "Authoritarian Elections and Leadership

- Succession”; Gandhi and Przeworski. “Authoritarian Institutions and the Survival of Autocrats”; Magaloni, “Credible Power-Sharing and the Longevity of Authoritarian Rule”; Meng, “When Do Autocrats Share Power?”
44. Chernykh and Svolik, “Third-Party Actors and the Success of Democracy”; Hyde and Marinov, “Information and Self-Enforcing Democracy”; Luo, Zhaotian, and Arturas Rozenas, “The Election Monitor’s Curse.”
 45. For contemporary models in this tradition, see Georgy Egorov and Konstantin Sonin. “Elections in Non-Democracies”; Little, “Are Non-competitive Elections Good for Citizens?”
 46. For the closely related models of authoritarian accountability, see Bueno de Mesquita et al., *The Logic of Political Survival*, Padró i Miquel, “The Control of Politicians in Divided Societies”; Lorentzen, “Regularizing Rioting”; and Chen and Xu, “Why Do Authoritarian Regimes Allow Citizens to Voice Opinions Publicly?”
 47. David Hume appears to have understood the informational underpinnings of collective action problems when he wrote in *Of the Original Contract*: “When an artful and bold man is placed at the head of an army or faction, it is often easy for him ... to establish his dominions over a people a hundred times more numerous than his partisans. He allows no such open communication that his enemies can know, with certainty, their number and force. Even those, who are the instruments of his usurpation, may wish his fall; but their ignorance of each other’s intentions keeps them in awe, and is the sole cause of his security.”
 48. Bidner, Chris, and Patrick Francois. “The Emergence of Political Accountability”; Meirowitz and Tucker, “People Power or a One-shot Deal?”; Myerson, “Federalism and Incentives for Success of Democracy”; Svolik, “Learning to Love Democracy.”
 49. See, for instance, my earlier discussion of O’Donnell and Schmitter, *Transitions from Authoritarian Rule*.
 50. For more on this point, see Little and Pepinsky, “Simple and Formal Models of Comparative Politics.”
 51. See Albertus, *Autocracy and Redistribution*; Ansell and Samuels. *Inequality and Democratization*; Freeman and Quinn, “The Economic Origins of Democracy Reconsidered”; Haggard and Kaufman. “Inequality and Regime Change.”
 52. See Ticchi and Vindigni, “War and Endogenous Democracy”; Dower et al., “Collective Action and Representation in Autocracies”; Corvalan et al., “The Political Class and Redistributive Policies.”
 53. Lipset, “Some Social Requisites for Democracy”; Dahl, *Polyarchy*; Huntington, *The Third Wave*.
 54. Moore, *Social Origins of Dictatorship and Democracy*, 418.
 55. Bueno de Mesquita, “Regime Change and Revolutionary Entrepreneurs”; Little, “Elections, Fraud, and Election Monitoring in the Shadow of Revolution”; Shadmehr, “Mobilization, Repression, and Revolution”; Rundlett and Svolik, “Deliver the Vote!”
 56. Schelling, *The Strategy of Conflict*.
 57. Fearon, “Rationalist Explanations for War”; Powell, “War as a Commitment Problem.”
 58. Lipset, “Some Social Requisites for Democracy”; Moore, *Social Origins of Dictatorship and Democracy*.
 59. Clarke and Primo, *A Model Discipline*; Morton, *Methods and Models*.
 60. Bates et al., *Analytic Narratives*; Debs, “The Empirical Promise of Game Theory”; Kuehn, “Combining Game Theory Models and Process Tracing”; Lorentzen et al., “Qualitative Investigation of Theoretical Models”; Debs, “The Empirical Promise of Game Theory.”
 61. For a complementary perspective, see Huber, “Is Theory Getting Lost in the ‘Identification Revolution?’”
 62. See Chapter 7 in Gehlbach, *Formal Models of Domestic Politics*, for a review.
 63. For an example of a non-formal approach to democratization in this vein, see Weyland, *Making Waves*.

Acknowledgements

The author would like to thank Michael Coppedge, Daniel Goldstein, Nathan Grubman, David Kuehn, Melis Laebens, Andrew Little, Jack Paine, Bonnie Weir, and participants at a workshop at Heidelberg University for helpful comments and conversations. Daniel Goldstein provided excellent research assistance. The phrase “Democracy as an Equilibrium” in the title is borrowed from Chapter 1 in Adam Przeworski’s *Democracy and the Market*.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Milan W. Svolik is Professor of Political Science at Yale University. His research and teaching focus on comparative politics, political economy, and formal political theory. Svolik's articles on the politics of authoritarian regimes and democratization appeared in leading political science journals, including the *American Political Science Review*, the *American Journal of Political Science*, and the *Journal of Politics*. He is the author of *The Politics of Authoritarian Rule* (Cambridge University Press, 2012).

Bibliography

- Acemoglu, Daron, and James A. Robinson. "A Theory of Political Transitions." *American Economic Review* 91, no. 4 (2001): 938–963.
- Acemoglu, Daron, and James A. Robinson. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press, 2005.
- Acemoglu, Daron, Davide Ticchi, and Andrea Vindigni. "A Theory of Military Dictatorships." *American Economic Journal: Macroeconomics* 2, no. 1 (2010): 1–42.
- Albertus, Michael. *Autocracy and Redistribution: The Politics of Land Reform*. New York: Cambridge University Press, 2015.
- Ansell, Ben W., and David J. Samuels. *Inequality and Democratization: An Elite-competition Approach*. New York: Cambridge University Press, 2014.
- Bates, Robert H., Avner Greif, Margaret Levi, and Jean-Laurent Rosenthal. *Analytic Narratives*. Princeton, NJ: Princeton University Press, 1998.
- Bidner, Chris, and Patrick Francois. "The Emergence of Political Accountability." *The Quarterly Journal of Economics* 128, no. 3 (2013): 1397–1448.
- Bidner, Chris, Patrick Francois, and Francesco Trebbi. "A Theory of Minimalist Democracy." Unpublished Manuscript, 2015.
- Boix, Carles. *Democracy and Redistribution*. Cambridge: Cambridge University Press, 2003.
- Boix, Carles, and Milan W. Svolik. "The Foundations of Limited Authoritarian Government: Institutions and Power-sharing in Dictatorships." *The Journal of Politics* 75, no. 2 (2013): 300–316.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. *The Logic of Political Survival*. Cambridge: MIT Press, 2003.
- Bueno de Mesquita, Ethan. "Regime Change and Revolutionary Entrepreneurs." *American Political Science Review* 104, no. 3 (2010): 446–466.
- Calvert, Randall L. "Rational Actors, Equilibrium, and Social Institutions." In *Explaining Social Institutions*, edited by Jack Knight and Itai Sened, 57–93. Ann Arbor: University of Michigan Press, 1995.
- Casper, Brett Allen, and Scott A. Tyson. "Popular Protest and Elite Coordination in a Coup d'État." *The Journal of Politics* 76, no. 2 (2014): 548–564.
- Casper, Gretchen, and Michelle M. Taylor. *Negotiating Democracy: Transitions from Authoritarian Rule*. Pittsburgh: University of Pittsburgh Press, 1996.
- Chen, Jidong, and Yiqing Xu. "Why Do Authoritarian Regimes Allow Citizens to Voice Opinions Publicly?" *The Journal of Politics* 79, no. 3 (2017): 792–803.
- Chernykh, Svitlana, and Milan W. Svolik. "Third-party Actors and the Success of Democracy: How Electoral Commissions, Courts, and Observers Shape Incentives for Electoral Manipulation and Post-election Protests." *The Journal of Politics* 77, no. 2 (2015): 407–420.
- Clarke, Kevin A., and David M. Primo. *A Model Discipline: Political Science and the Logic of Representations*. New York: Oxford University Press, 2012.
- Coppedge, Michael. *Democratization and Research Methods*. New York: Cambridge University Press, 2012.
- Corvalan, Alejandro, Pablo Querubin, and Sergio Vicente. "The Political Class and Redistributive Policies." Unpublished Manuscript.

- Cox, Gary W. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. New York: Cambridge University Press, 1997.
- Cox, Gary W. "Authoritarian Elections and Leadership Succession." Unpublished Manuscript.
- Crescenzi, Mark J. C. "Violence and Uncertainty in Transitions." *Journal of Conflict Resolution* 43, no. 2 (1999): 192–212.
- Dahl, Robert A. *Polyarchy: Participation and Opposition*. New Haven, CT: Yale University Press, 1971.
- Debs, Alexandre. "The Empirical Promise of Game Theory." In *Oxford Research Encyclopedia of Politics*. Oxford: Oxford University Press, 2017.
- Di Palma, Giuseppe. *To Craft Democracies: An Essay on Democratic Transitions*. Berkeley: University of California Press, 1990.
- Dower, Paul Castaneda, Evgeny Finkel, Scott Gehlbach, and Steven Nafziger. "Collective Action and Representation in Autocracies: Evidence from Russia's Great Reforms." *American Political Science Review* 112, no. 1 (2018): 125–147.
- Dragu, Tiberiu, and Yonatan Lupu. "Collective Action and Constraints on Repression at the Endgame." *Comparative Political Studies* 51, no. 8 (2018): 1042–1073.
- Dragu, Tiberiu, and Adam Przeworski. "Preventive Repression: Two Types of Moral Hazard." Unpublished Manuscript.
- Edmond, Chris. "Information Manipulation, Coordination, and Regime Change." *Review of Economic Studies* 80, no. 4 (2013): 1422–1458.
- Egorov, Georgy, and Konstantin Sonin. "Elections in Non-democracies." Unpublished Manuscript.
- Fearon, James D. "Rationalist Explanations for War." *International Organization* 49, no. 3 (1995): 379–414.
- Fearon, James D. "Self-enforcing Democracy." *The Quarterly Journal of Economics* 126, no. 4 (2011): 1661–1708.
- Freeman, John R., and Dennis P. Quinn. "The Economic Origins of Democracy Reconsidered." *American Political Science Review* 106, no. 1 (2012): 58–80.
- Gay, Victor, and Michael Albertus. "Unlikely Democrats: Economic Elite Uncertainty under Dictatorship and Support for Democratization." *American Journal of Political Science* 61, no. 3 (2016): 624–641.
- Geddes, Barbara. "Authoritarian Breakdown: Empirical Test of a Game Theoretic Argument." Unpublished Manuscript.
- Geddes, Barbara. "What Do We Know about Democratization after Twenty Years?" *Annual Review of Political Science* 2 (1999): 115–144.
- Geddes, Barbara. *Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics*. Ann Arbor: University of Michigan Press, 2003.
- Gehlbach, Scott. *Formal Models of Domestic Politics*. Cambridge: Cambridge University Press, 2013.
- Gehlbach, Scott G., and Philip Keefer. "Investment without Democracy: Ruling-party Institutionalization and Credible Commitment in Autocracies." *Journal of Comparative Economics* 39, no. 2 (2011): 123–139.
- Gehlbach, Scott, and Alberto Simpser. "Electoral Manipulation as Bureaucratic Control." *American Journal of Political Science* 59, no. 1 (2015): 212–224.
- Gehlbach, Scott, Konstantin Sonin, and Milan W. Svoblik. "Formal Models of Non-democratic Politics." *Annual Review of Political Science* 19 (2016): 565–584.
- Gandhi, Jennifer. *Political Institutions under Dictatorship*. New York: Cambridge University Press, 2008.
- Gandhi, Jennifer, and Adam Przeworski. "Authoritarian Institutions and the Survival of Autocrats." *Comparative Political Studies* 40, no. 11 (2007): 1279–1301.
- Green, Donald, and Ian Shapiro. *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*. New Haven, CT: Yale University Press, 1994.
- Griev, Sergei, and Daniel Treisman. "How Modern Dictators Survive: An Informational Theory of the New Authoritarianism." Unpublished Manuscript.
- Haggard, Stephan, and Robert R. Kaufman. "Inequality and Regime Change: Democratic Transitions and the Stability of Democratic Rule." *American Political Science Review* 106, no. 3 (2012): 495–516.
- Hardin, Russell. "Why a Constitution?" In *The Federalist Papers and the New Institutionalism*, edited by Grofman Bernard and Wittman Donald, 100–120. New York: Agathon Press, 1989.

- Hollyer, James R., B. Peter Rosendorff, and James Raymond Vreeland. "Transparency, Protest and Democratic Stability." *British Journal of Political Science* (2018). doi:10.1017/S0007123417000308
- Huber, John. "Is Theory Getting Lost in the 'Identification Revolution'?" *The Political Economist* (2013).
- Huntington, Samuel P. *The Third Wave: Democratization in the Late Twentieth Century*. Norman: University of Oklahoma Press, 1993.
- Hyde, Susan, and Nikolay Marinov. "Information and Self-enforcing Democracy: The Role of International Election Observation." *International Organization* 68, no. 2 (2014): 329–359.
- Kuehn, David. "Combining Game Theory Models and Process Tracing: Potential and Limits." *European Political Science* 12, no. 1 (2013): 52–63.
- Kuran, Timur. "Sparks and Prairie Fires: A Theory of Unanticipated Political Revolution." *Public Choice* 61, no. 1 (1989): 41–74.
- Kuran, Timur. "The East European Revolution of 1989: Is It Surprising that We Were Surprised?" *American Economic Review* 81, no. 2 (1991): 121–125.
- Kuran, Timur. "Now Out of Never: The Element of Surprise in the East European Revolution of 1989." *World Politics* 44, no. 1 (1991): 7–48.
- Kuran, Timur. *Private Truths, Public Lies: The Social Consequences of Preference Falsification*. Cambridge: Harvard University Press, 1995.
- Levitsky, Steven, and Lucan A. Way. *Competitive Authoritarianism: Hybrid Regimes After the Cold War*. New York: Cambridge University Press, 2010.
- Linz, Juan J., and Alfred Stepan. *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-communist Europe*. Baltimore, MD: Johns Hopkins University Press, 1996.
- Lipset, Seymour M. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53, no. 1 (1959): 69–105.
- Little, Andrew T. "Elections, Fraud, and Election Monitoring in the Shadow of Revolution." *Quarterly Journal of Political Science* 7, no. 3 (2012): 249–283.
- Little, Andrew T. "Are Non-competitive Elections Good for Citizens?" *Journal of Theoretical Politics* 29, no. 2 (2017): 214–242.
- Little, Andrew T., and Thomas B. Pepinsky. "Simple and Formal Models in Comparative Politics." *Chinese Political Science Review* 1, no. 3 (2016): 425–447.
- Little, Andrew T., Joshua A. Tucker, and Tom LaGatta. "Elections, Protest, and Alternation of Power." *The Journal of Politics* 77, no. 4 (2015): 1142–1156.
- Lizzeri, Alessandro, and Nicola Persico. "Why Did the Elites Extend the Suffrage? Democracy and the Scope of Government, with an Application to Britain's 'Age of Reform'." *The Quarterly Journal of Economics* 119, no. 2 (2004): 707–765.
- Lorentzen, Peter L. "Regularizing Rioting: Permitting Public Protest in an Authoritarian Regime." *Quarterly Journal of Political Science* 8, no. 2 (2013): 127–158.
- Lorentzen, Peter, M. Taylor Fravel, and Jack Paine. "Qualitative Investigation of Theoretical Models: The Value of Process Tracing." *Journal of Theoretical Politics* 29, no. 3 (2017): 467–491.
- Luo, Zhaotian, and Arturas Rozenas. "The Election Monitor's Curse." *American Journal of Political Science* 62, no. 1 (2018): 148–160.
- Magaloni, Beatriz. "Credible Power-sharing and the Longevity of Authoritarian Rule." *Comparative Political Studies* 41, no. 4/5 (2008): 715–741.
- Magaloni, Beatriz. "The Game of Electoral Fraud and the Ousting of Authoritarian Rule." *American Journal of Political Science* 54, no. 3 (2010): 751–765.
- Meirowitz, Adam, and Joshua Tucker. "People Power or a One-shot Deal? A Dynamic Model of Protest." *American Journal of Political Science* 57, no. 2 (2013): 478–490.
- Meltzer, Allan H., and Scott F. Richards. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89, no. 5 (1981): 914–927.
- Meng, Anne. "When Do Autocrats Share Power? A Theory of Regime Institutionalization and Leader Strength." Unpublished Manuscript.
- Miller, Michael K. "Electoral Authoritarianism and Democracy: A Formal Model of Regime Transitions." *Journal of Theoretical Politics* 25, no. 2 (2013): 153–181.
- Morton, Rebecca B. *Methods and Models: A Guide to the Empirical Analysis of Formal Models in Political Science*. New York: Cambridge University Press, 1999.
- Moore, Barrington. *Social Origins of Dictatorship and Democracy*. Boston, MA: Beacon Press, 1966.

- Myerson, Roger B. "Federalism and Incentives for Success of Democracy." *Quarterly Journal of Political Science* 1, no. 1 (2006): 3–23.
- Nalepa, Monika. *Skeletons in the Closet: Transitional Justice in Post-communist Europe*. New York: Cambridge University Press, 2010.
- North, Douglass C., and Barry R. Weingast. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-century England." *The Journal of Economic History* 49, no. 4 (1989): 803–832.
- O'Donnell, Guillermo, and Philippe C. Schmitter. *Transitions from Authoritarian Rule: Comparative Perspectives*. Baltimore, MD: Johns Hopkins University Press, 1986.
- Olson, Mancur. "Dictatorship, Democracy, and Development." *American Political Science Review* 87, no. 3 (1993): 567–576.
- Padró i Miquel, Gerard. "The Control of Politicians in Divided Societies: The Politics of Fear." *The Review of Economic Studies* 74, no. 4 (2007): 1259–1274.
- Powell, Robert. "War as a Commitment Problem." *International Organization* 60, no. 1 (2006): 169–203.
- Przeworski, Adam. "Some Problems in the Study of the Transition to Democracy." In *Transitions From Authoritarian Rule: Comparative Perspectives*, edited by Guillermo A. O'Donnell, Philippe C. Schmitter, and Laurence Whitehead, 47–63. Baltimore, MD: Johns Hopkins University Press, 1986.
- Przeworski, Adam. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. Cambridge: Cambridge University Press, 1991.
- Przeworski, Adam, Gonzalo Rivero, and Tianyang Xi. "Elections as a Conflict Processing Mechanism." *European Journal of Political Economy* 39, no. 2 (2015): 235–248.
- Riker, William H. "Implications from the Disequilibrium of Majority Rule for the Study of Institutions." *American Political Science Review* 74, no. 2 (1980): 432–446.
- Rozenas, Arturas. "Office Insecurity and Electoral Manipulation." *The Journal of Politics* 78, no. 1 (2016): 232–248.
- Rundlett, Ashlea, and Milan W. Svobik. "Deliver the Vote! Micromotives and Macrobehavior in Electoral Fraud." *American Political Science Review* 110, no. 1 (2016): 180–119.
- Schedler, Andreas. *The Politics of Uncertainty: Sustaining and Subverting Electoral Authoritarianism*. Oxford: Oxford University Press, 2013.
- Schelling, Thomas C. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press, 1960.
- Shadmehr, Mehdi. "Mobilization, Repression, and Revolution: Grievances and Opportunities in Contentious Politics." *The Journal of Politics* 76, no. 3 (2014): 621–635.
- Shepsle, Kenneth A. "Institutional Equilibrium and Equilibrium Institutions." In *Political Science: The Science of Politics*, edited by Herbert Weisberg, 51–81. New York: Agathon, 1986.
- Shepsle, Kenneth A. "Rational Choice Institutionalism." In *The Oxford Handbook of Political Institutions*, edited by R. A. W. Rhodes, Sarah Binder, and Bert A. Rockman, 23–38. New York: Oxford University Press, 2006.
- Siegel, David A. "When Does Repression Work? Collective Action in Social Networks." *The Journal of Politics* 73, no. 4 (2011): 993–1010.
- Simpser, Alberto. *Why Governments and Parties Manipulate Elections: Theory, Practice, and Implication*. New York: Cambridge University Press, 2013.
- Stasavage, David. *Public Debt and the Birth of the Democratic State: France and Great Britain, 1688–1789*. New York: Cambridge University Press, 2003.
- Svobik, Milan W. "Power Sharing and Leadership Dynamics in Authoritarian Regimes." *American Journal of Political Science* 53, no. 2 (2009): 477–494.
- Svobik, Milan W. "Elections in the Shadow of Force: Commitment Problems and the Survival of Democracy." Unpublished Manuscript, 2015.
- Svobik, Milan W. *The Politics of Authoritarian Rule*. New York: Cambridge University Press, 2012.
- Svobik, Milan W. "Contracting on Violence: Moral Hazard in Authoritarian Repression and Military Intervention in Politics." *Journal of Conflict Resolution* 57, no. 5 (2013): 765–794.
- Svobik, Milan W. "Learning to Love Democracy: Electoral Accountability and the Success of Democracy." *American Journal of Political Science* 57, no. 3 (2013): 685–702.
- Svobik, Milan W. "When Polarization Trumps Civic Virtue: Partisan Conflict and the Subversion of Democracy by Incumbents." Unpublished Manuscript.
- Ticchi, Davide, and Andrea Vindigni. "War and Endogenous Democracy." Unpublished Manuscript.
- Tucker, Joshua A. "Enough! Electoral Fraud, Collective Action Problems, and Post-communist Colored Revolutions." *Perspectives on Politics* 5, no. 4 (2007): 535–551.

- Tyson, Scott A., and Alastair Smith. "Dual-layered Coordination and Political Instability: Repression, Co-optation, and the Role of Information." *The Journal of Politics* 80, no. 1 (2018): 44–58.
- Waldner, David, and Ellen Lust. "Unwelcome Change: Coming to Terms with Democratic Backsliding." *Annual Review of Political Science* 21 (2018): 93–113.
- Weingast, Barry R. "The Political Foundations of Democracy and the Rule of the Law." *American Political Science Review* 91, no. 2 (1997): 245–263.
- Weingast, Barry R. "Political Institutions: Rational Choice Perspectives." In *A New Handbook of Political Science*, edited by Robert E. Goodin and Hans-Dieter Klingemann, 167–190. Oxford: Oxford University Press, 1998.
- Weyland, Kurt. *Making Waves: Democratic Contention in Europe and Latin America Since the Revolutions of 1848*. New York: Cambridge University Press, 2014.