

Votes from Seats

Take the number of seats in a representative assembly and the number of seats in districts through which this assembly is elected. From just these two numbers, the authors of *Votes from Seats* show that it is possible to deduce the number of parties in the assembly and in the electorate, as well as the size of the largest party. Inside parties, the vote distributions of individual candidates likewise follow predictable patterns. Four laws of party seats and votes are constructed by logic and tested, using scientific approaches rare in social sciences. Both complex and simple electoral systems are covered, and the book offers a set of “best practices” for electoral system design. The ability to predict so much from so little, and to apply to countries worldwide, is an advance in the systematic analysis of a core institutional feature found in any democracy, and points the way towards making social sciences more predictive.

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Logical Models of Electoral Systems

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Preface and Acknowledgments

This book, *Votes from Seats*, does two things that look impossible, one in electoral studies and the other for political science more broadly.

It multiplies together the number of seats in the representative assembly (assembly size) and the number of seats in individual electoral districts (district magnitude) through which this assembly is elected. From this “seat product” it deduces the number of parties in the assembly, as well as the size of the largest, testing this logical model more fully than earlier (Taagepera 2007). Then it advances into completely novel terrain, with further logic leading to the prediction of the number of parties receiving votes once we have predicted their seats. This is why the title of the book is *Votes from Seats*. Predicting disproportionality follows.

The same fundamental logic then allows us to make some quantitative predictions for patterns where the seat product would not seem to matter at all: competition in presidential elections and inside the parties. In contrast to most prior scholarship, we find that party systems in presidential democracies are not so different from their parliamentary counterparts. At the level of an individual district, the same output indicators can be deduced from district magnitude, but surprisingly, the size of the nationwide assembly in which a district is “embedded” also matters. This finding reverses the usual way of thinking about how district and national politics connect. Rather than start at the districts and project up to the national level, we use assembly size, in conjunction with district magnitude, to predict district-level outputs.

All this vastly expands our understanding and predictive ability as compared to our earlier work on electoral, party, and presidential systems (Taagepera and Shugart 1989a and 1993; Shugart and Carey 1992; Taagepera 2007; Samuels and Shugart 2010). It takes into account the efforts of many other researchers such as Lijphart (1994); Reed (1990, 2003); Cox (1997); Clark and Golder (2006); and Hicken and Stoll (2011).

It is now possible to understand how design and reform of electoral systems will play out in practice. Actual worldwide averages fit the book's predictions remarkably well. They supply a benchmark for assessing an individual country: If a country's party constellations differ markedly from those expected on the basis of their assembly and district sizes, it would be time to look for which other country-specific political factors are at play.

This is the book's *impossible-looking* contribution to electoral studies: the ability to predict so much from so little. How is this possible? The answer leads us to the book's broader contribution to social science.

There is a huge difference between "understanding something," something "explaining" something else, having "an impact" on it, and quantitatively predicting the size of this something else. "Explaining" may mean retroactive understanding, with no hint for the future. "Having an impact" implies altering it in some direction, to an undefined extent. "Quantitatively predicting" means: "If this factor has this value, then, *ceteris paribus*, this other factor has that value," within a range of likely variation. Such prediction may come from empirical knowledge. It rises to the highest level of scientific law when it is also grounded in logic. Then it, of course, also explains.

We establish a network of "quantitatively predictive logical models." These models (Taagepera 2008) start with logical thinking about observations, rather than fitting data by regression techniques. The resulting equations connect a few variables at a time (rather than numerous input variables and "controls") and then connect these connections with each other. Having connections among connections is a hallmark of any developed science. In electricity, for instance, a network of equations connects factors such as electric charge, voltage, current intensity, resistance, force, and power. Philosophical arguments abound why this would be impossible in political science, or social sciences more generally. In *Votes from Seats* we do not argue whether it can be done; we just do it. By presenting and testing a set of interconnected quantitative connections among various factors, this book sets an example for a more *scientific* approach to society and politics. We hope this allows it to set a methodological standard for social science beyond the specific topics of electoral and party systems.

HOW THE BOOK WAS POSSIBLE

We have been working together on topics concerning electoral systems and quantitative logical modeling since Shugart was an undergraduate and then a graduate student at the University of California, Irvine, longer ago than either of us would care to remember. It thus would be an understatement to say that we both have written on electoral systems before (including Taagepera 1972, 1973, 1986, 2007; Taagepera and Shugart 1989a, 1989b, 1993; Shugart 1988,

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2005a; Shugart and Carey 1992; Bergman, Shugart, and Watt 2013; Li and Shugart 2016). Yet, as the preceding overview suggests, we have extended our separate and joint work in new directions and uncovered new things along the way that find their place in this book for the first time. Moreover, we have developed findings and methods that call into question, in various ways, those of other prominent scholars in the subject area.

This book would not have been possible even a few short years ago, because the large datasets we have at our disposal simply did not exist. We owe a massive debt of gratitude to the teams of scholars who have done the work of collecting such data and providing the public good of letting other scholars use them. Following in their footsteps, we will be making public two even more expanded datasets, which we have used for the core quantitative tasks of this book.

The nationwide dataset is Li and Shugart (n.d.), “National Party Systems Dataset.” This starts from Bormann and Golder (2011), “Democratic Electoral Systems Around the World, 1946-2011,” and is supplemented with variables from Carey and Hix (2011), as well as several additional variables that appear in our dataset for the first time. The district level dataset is Belden and Shugart (n.d.), “District-Level Party Systems Dataset.” This builds upon the Constituency Level Electoral Archive (CLEA; Kollman et al. 2016), but extends to additional countries and variables not originally in the CLEA.

Candidate-level votes for assembly elections are from Shugart’s dataset, “The Intra-Party Dimension of Representation,” except for data from Taiwan (generously provided by Nathan Batto) and Japan (from the “Party Personnel” dataset, collected in collaboration with Ellis Krauss and Robert Pekkanen). Shugart acknowledges two National Science Foundation grants that made his data collection possible (SES-0452573 and SES-0751662). Candidate-level data on Finland that we use in Chapters 6 and 14 were greatly improved through collaboration with Åsa von Schoultz.

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