MULTIPARTY DEMOCRACY

This book adapts a formal model of elections and legislative politics to study party politics in Israel, Italy, the Netherlands, Britain, and the United States. The approach uses the idea of valence—that is, the party leader's nonpolicy electoral popularity—and employs survey data to model these elections. The analysis explains why small parties in Israel and Italy keep to the electoral periphery. In the Netherlands, Britain, and the United States, the electoral model is extended to include the behavior of activists. In the case of Britain, it is shown that there will be contests between activists for the two main parties over who controls policy. Regarding the recent 2005 election, it is argued that the losses of the Labour Party were due to Blair's falling valence. For the United States, the model gives an account of the rotation of the locations of the two major parties over the last century.

Norman Schofield is the William Taussig Professor in Political Economy at Washington University in St. Louis. He served as Fulbright Distinguished Professor of American Studies at Humboldt University Berlin in 2003–4 and held a Fellowship at the Center for Advanced Study in the Behavioral Sciences at Stanford in 1988–9. Professor Schofield is the author of *Architects of Political Change* (Cambridge University Press, 2006), *Mathematical Methods in Economics and Social Choice* (2003), *Multiparty Government* (coauthored with Michael Laver, 1990), and *Social Choice and Democracy* (1985). He received the William Riker Prize in 2002 for contributions to political theory and was co-recipient with Gary Miller of the Jack L. Walker Prize for the best article on political organizations and parties in the *American Political Science Review* for 2002–4.

Itai Sened is professor and chair of the Department of Political Science at Washington University in St. Louis. He is also the director of the Center for New Institutional Social Sciences there since 2000 and formerly taught at Tel Aviv University. Professor Sened is coauthor (with Gideon Doron) of *Political Bargaining: Theory, Practice, and Process* (2001), author of *The Political Institution of Private Property* (Cambridge University Press, 1997), and coeditor (with Jack Knight) of *Explaining Social Institutions* (1995). His research has been published in leading journals such as the *American Journal of Political Science, Journal of Politics, Journal of Theoretical Research*.

POLITICAL ECONOMY OF INSTITUTIONS AND DECISIONS

Series Editor

Stephen Ansolabehere, Massachusetts Institute of Technology

Founding Editors

James E. Alt, Harvard University Douglass C. North, Washington University, St. Louis

Other Books in the Series

Alberto Alesina and Howard Rosenthal, Partisan Politics, Divided Government, and the Economy Lee J. Alston, Thráinn Eggertsson, and Douglass C. North, eds., Empirical Studies in Institutional Change Lee J. Alston and Joseph P. Ferrie, Southern Paternalism and the Rise of the American Welfare State: Economics, Politics, and Institutions, 1865–1965 James E. Alt and Kenneth Shepsle, eds., Perspectives on Positive Political Economy Josephine T. Andrews, When Majorities Fail: The Russian Parliament, 1990-1993 Jeffrey S. Banks and Eric A. Hanushek, eds., Modern Political Economy: Old Topics, New Directions Yoram Barzel, Economic Analysis of Property Rights, 2nd edition Yoram Barzel, A Theory of the State: Economic Rights, Legal Rights, and the Scope of the State Robert Bates, Beyond the Miracle of the Market: The Political Economy of Agrarian Development in Kenya, 2nd edition Charles M. Cameron, Veto Bargaining: Presidents and the Politics of Negative Power Kelly H. Chang, Appointing Central Bankers: The Politics of Monetary Policy in the United States and the European Monetary Union Peter Cowhey and Mathew McCubbins, eds., Structure and Policy in Japan and the United States: An Institutionalist Approach Gary W. Cox, The Efficient Secret: The Cabinet and the Development

of Political Parties in Victorian England

Continued on page following Index

MULTIPARTY DEMOCRACY

Elections and Legislative Politics

NORMAN SCHOFIELD AND ITAI SENED Washington University in St. Louis





Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi - 110025, India

103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9780521450355

© Norman Schofield and Itai Sened 2006

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2006

A catalogue record for this publication is available from the British Library

```
Library of Congress Cataloging-in-Publication data
Schofield, Norman, 1944-
Multiparty democracy : elections and legislative politics / Norman Schofield and
Itai Sened
   p. cm. – (Political economy of institutions and decisions)
Includes bibliographical references and index.
ISBN-13: 978-0-521-45035-5 (hardback)
ISBN-10: 0-521-45035-7 (hardback)
ISBN-13: 978-0-521-45658-6 (pbk.)
ISBN-IO: 0-52I-45658-4 (pbk.)
1. Political parties. 2. Democracy. 3. Elections.
I. Sened, Itai. II. Title. III. Series.
JF2051.8283 2006
324.9-dc22
                                                               2006005639
ISBN
       978-0-521-45035-5
                            Hardback
       978-0-521-45658-6
                            Paperback
ISBN
```

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

www.cambridge.org

For Elizabeth and Sarit

Contents

List of Tables and Figures Preface		<i>page</i> xiii xix	
I	Mul	tiparty Democracy	I
	1.1	Introduction	I
	1.2	The Structure of the Book	8
	1.3	Acknowledgments	10
2	Elect	tions and Democracy	II
	2.1	Electoral Competition	II
	2.2	Two-Party Competition under Plurality Rule	13
	2.3	Multiparty Representative Democracy	15
	2.4	The Legislative Stage	17
		2.4.1 Two-Party Competition with Weakly	
		Disciplined Parties	18
		2.4.2 Party Competition under Plurality Rule	18
		2.4.3 Party Competition under Proportional	
		Representation	19
		2.4.4 Coalition Bargaining	19
	2.5	The Election	20
	2.6	Expected Vote Maximization	21
		2.6.1 Exogenous Valence	21
		2.6.2 Activist Valence	2.2
		2.6.3 Activist Influence on Policy	23
	2.7	Selection of the Party Leader	23
	2.8	Example: Israel	25
	2.9	Electoral Models with Valence	32
	2.10	The General Model of Multiparty Politics	34

Contents

		2.10.1 Policy Preferences of Party Principals	34 34
	2	A Theory of Political Competition	27
	3	A Theory of Fondeal Competition	3/
		2.2 Local Equilibria under Electoral Uncertainty	40
		2 2 The Core and the Heart	55
		3.4 Example: The Netherlands	55 61
		3.5 Example: Israel	64
		3.6 Appendix: Proof of Theorem 3.1	67
	4	Elections in Israel, 1988–1996	70
		4.1 An Empirical Vote Model	74
		4.2 Comparing the Formal and Empirical Models	88
		4.3 Coalition Bargaining	92
		4.4 Conclusion: Elections and Legislative Bargaining	95
		4.5 Appendix	97
	5	Elections in Italy, 1992–1996	101
		5.1 Introduction	101
		5.2 Italian Politics Before 1992	102
		5.3 The New Institutional Dimension: 1991–1996	105
		5.4 The 1994 Election	110
		5.4.1 The Pre-Election Stage	110
		5.4.2 The Electoral Stage	112
		5.4.3 The Coalition Bargaining Game	113
		5.5 The 1996 Election	116
		5.5.1 The Pre-Election Stage	117
		5.5.2 The Electoral Stage	120
		5.5.3 The Coalition Bargaining Game	123
		5.6 Conclusion	124
	,		120
	6	Elections in the Netherlands, 1979–1981	128
		6.1 The Spatial Model with Activists	128
		6.2 Models of Elections with Activists in the Netherlands	131
		6.4 Empirical Appendix	142
	_	Elections in Driteir and a second	143
	7	Elections in Britain, 1979–2005	151
		7.1 Fire Elections of 1979, 1992, and 1997	152
		7.2 A Formal Model of Vote-Maximizing with Activists	139
		/·· J III Official Woodel Of Vote-Wiaximizing with Activists	103

Contents

	7.4	Activist and Exogenous Valence	168
	7.5	Conclusion	170
	7.6	Technical Appendix	172
		7.6.1 Computation of Eigenvalues	172
		7.6.2 Proof of Theorem 7.1	173
8	Poli	tical Realignments in the United States	175
	8.1	Critical Elections in 1860 and 1964	175
	8.2	A Brief Political History, 1860–2000	180
	8.3	Models of Voting and Candidate Strategy	185
	8.4	A Joint Model of Activists and Voters	189
	8.5	The Logic of Vote Maximization	193
	8.6	Dynamic Local Equilibria	195
	8.7	Appendices	197
9	Con	cluding Remarks	199
	9.1	Assessment of the Model	199
	9.2	Proportional Representation	200
		9.2.1 The Election of September 2005 in Germany	201
		9.2.2 Recent Changes in the Israel Knesset	202
	9.3	Plurality Rule	206
	9.4	Theory and Empirical Evidence	207
Refe	erence	75	209
Inde	ex		219

List of Tables and Figures

TABLES

1.1	Political Systems Determined by the Electoral Rule and	
	Party Discipline.	page 7
2.1	Elections in Israel, 1998–2003.	26
3.1	Election Results in the Netherlands, 1977–1981.	62
4.1	Interpretation of Evidence Provided by the Bayes Factor	
	B_{st} .	81
4.2	Bayes Factor B_{st} for M_s against M_t for the 1988 Election.	81
4.3	Bayes Factor B_{st} for M_s against M_t for the 1992 Election.	81
4.4	Bayes Factor B_{st} for M_s against M_t for the 1996 Election.	81
4.5	National and Sample Vote-Shares and Valence Coefficients	5
	for Israel, 1988–1996.	82
A4.1	Factor Analysis Results for Israel for the Election of 1996.	97
A4.2	Multinomial Logit Analysis of the 1996 Election in Israel	
	(normalized with respect to Meretz).	98
A4.3	Multinomial Logit Analysis of the 1992 Election in Israel	
	(normalized with respect to Meretz).	99
A4.4	Multinomial Logit Analysis of the 1988 Election in Israel	
	(normalized with respect to Meretz).	100
5.1	Italian Elections: Votes/Seats in the Chamber of Deputies,	
	1987–1996.	107
5.2	The 1994 Election Results in Italy: Chamber and Senate.	114
5.3	The 1996 Election Results in Italy: Chamber and Senate.	119
A5.1	Logit Analysis for the 1996 Election in Italy (normalized	
	with respect to RC).	126
6.1	Election Results in the Netherlands, 1977-1981.	135

List of Tables and Figures

6.2	Vote-Shares, Valences, and Spatial Coefficients for Empirical Models in the Elections in the Netherlands	
	1977–1981.	135
6.3	Log Likelihoods and Eigenvalues in the Dutch Electoral	
	Model.	137
A6.1	Factor Weights for the Policy Space in the Netherlands.	145
A6.2	Probit Analysis of the 1979 Dutch Survey Data (normalized	
	with respect to D'66).	146
A6.3	Multinomial Logit Analysis of the 1979 Dutch Survey Data	
	(normalized with respect to D'66).	147
7.1	Elections in Britain in 2005, 2001, 1997, and 1992.	153
7.2	Factor weights from the British National Election Survey	
	for 1997.	155
7.3	Question Wordings for the British National Election	
	Surveys for 1997.	155
7.4	Sample and Estimation Data for Elections in Britain,	
	1992–1997.	157
8.1	Presidential State Votes, 1896 and 2000.	176
8.2	Simple Regression Results between the Elections of 1896,	
	1960, and 2000, by State.	177

FIGURES

2.1	An illustration of instabiliy under deterministic voting with	
	three voters with preferred points A, B, and C.	14
2.2	Estimated party positions in the Knesset at the 1992	
	election.	27
2.3	Estimated median lines and core in the Knesset after the	
	1992 election.	28
2.4	Estimated median lines and empty core in the Knesset after	
	the 1988 election.	29
2.5	Estimated party positions in the Knesset in 1996.	31
2.6	A schematic representation of the configuration of parties	
	in the Knesset after 2003.	32
3.1	Estimated party positions in the Netherlands, based on	-
-	1979 data.	63
3.2	Coalition risk in the Netherlands at the 1981 election.	64
3.3	Estimated party positions and core in the Knesset after the	
	1992 election.	65

List of Tables and Figures

3.4	Estimated party positions and heart in the Knesset after the 1988 election.	66
3.5	Estimated party positions in the Knesset after the 1996 election.	67
4 . 1	Party positions and electoral distribution (at the 95%, 75%, 50%, and 10% levels) in the Knesset at the election	,
	of 1996.	77
4.2	Party positions and electoral distribution (at the 95%,	
	75%, 50%, and 10% levels) in the Knesset at the election	
	of 1992.	78
4.3	Party positions and electoral distribution (at the 95%,	
	75%, 50%, and 10% levels) in the Knesset at the election	
	of 1988.	79
4.4	A representative local Nash equilibrium of the	
	vote-maximizing game in the Knesset for the 1996 election.	85
4.5	A representative local Nash equilibrium of the	
	vote-maximizing game in the Knesset for the 1992 election.	86
4.6	A representative local Nash equilibrium of the	
	vote-maximizing game in the Knesset for the 1988 election.	87
5.1	Party policy positions (based on the manifesto data set) and	
	party seat strength in Italy in 1987.	104
5.2	Changes in the political party landscape between the 1980s	
	and 1990s.	106
5.3	Hypothetical party policy positions and seats in Italy in	
	1992.	108
5.4	Party policy positions and seats in Italy after the 1994	
	election.	III
5.5	Distribution of Italian voter ideal points and party	
	positions in 1996. The contours give the 95%, 75%, 50%,	
	and 10% highest density regions of the distribution.	116
5.6	Party policy positions and the empty core following the	
	1996 election in Italy.	120
6.1	Distribution of voter ideal points and party positions in the	
	Netherlands.	134
A6.1	Estimated stochastic vote-share functions for the Pvda,	
	VVD, CDA, and D'66 (based on 1979 data and the party	
	positions given in Figure 6.1). (Source: Schofield, Martin,	
	Quinn, and Whitford, 1998.)	148

List of Tables and Figures

A6.2	Estimated probability functions for voting for the CDA and VVD. (Source: Schofield, Martin, Quinn, and Whitford,	
	1998.)	149
A6.3	Estimated probability functions for voting for the Pvda and	
	D'66. (Source: Schofield, Martin, Quinn, and Whitford,	
	1998.)	150
7.1	Distribution of voter ideal points and party positions in Britain in the 1979 election, for a two-dimensional model, showing the highest density contours of the sample voter	
	distribution at the 95%, 75%, 50%, and 10% levels.	152
7.2	Estimated party positions in the British Parliament in 1992	5
	and 1997, for a one-dimensional model (based on the	
	National Election Survey and voter perceptions) showing	
	the estimated density function (of all voters outside	
	Scotland).	156
7.3	Estimated party positions in the British Parliament for a	
	two-dimensional model for 1997 (based on MP survey data	
	and the National Election Survey) showing highest density contours of the voter sample distribution at the 05% -75%	
	so% and to% levels	160
7.4	Estimated MP positions in the British Parliament in 1997.	100
/ • •	based on MP survey data and a two-dimensional factor	
	model derived from the National Election Survey.	161
7.5	Illustration of vote-maximizing party positions of the	
	Conservative and Labour leaders for a two-dimensional	
	model.	166
8.1	A schematic representation of the election of 1860 in a	0
0.	two-dimensional policy space.	181
8.2	condidates 1860 1806	T 8 2
8 2	Policy shifts by the Democratic Party <i>circa</i> 1922	102 182
8.4	Estimated presidential candidate positions, 1964–1980.	103 184
8.5	The two-dimensional factor space, with voter positions and	-°7
5	Johnson's and Goldwater's respective policy positions in	
	1964, with linear estimated probability vote functions (log	
	likelihood = -617).	186
8.6	The two-dimensional factor space, with voter positions and	
	Carter's and Reagan's respective policy positions in 1980,	
	with linear estimated probability vote functions (log	
	likelihood = -372).	187

xvi

List of Tables and Figures

8.7	Illustration of vote-maximizing positions for a Republican	
	presidential candidate (Goldwater) facing a Democratic	
	candidate (Johnson).	190
9.1	Schematic representation of party positions in the	
	Bundestag in Germany, September 2005.	202
9.2	A schematic representation of the configuration of the	
	Knesset in 2003.	203
9.3	The configuration of the Knesset after Peretz becomes	
	leader of Labour.	204
9.4	The effect of the creation of Kadima by Ariel Sharon on the	
	configuration of the Knesset.	205
9.5	The configuration of the Knesset after the election of 28	
	March, 2006.	206

xvii

Preface

This book closes a phase of a research program that has kept us busy for more than ten years. It sets out a theory of multiparty electoral politics and evaluates this theory with data from Israel, Italy, the Netherlands, Britain, and the United States.

Four decades ago, our teacher and mentor, William H. Riker, started this effort with *The Theory of Political Coalitions* (1962). What is perhaps not remembered now is that Riker's motivation in writing this book came from a question that he had raised in his much earlier book, Democracy in the United States (1953): Why did political competition in the United States seem to result in roughly equally sized political coalitions of disparate interests? His answer was that minimal-winning coalitions were efficient means of dividing the political spoil. This answer was, of course, not complete, because it left out elections-the method by which parties gain political power in a democracy. His later book, Positive Political Theory (1973), with Peter Ordeshook, summed up the theory available at that time, on two-party elections. The main conclusion was that parties would tend to converge to an electoral center-either the median or mean of the electoral distribution. Within a few years, this convenient theoretical conclusion was shown to be dependent on assumptions about the low dimension of the policy space. The chaos results that came in the 1970s were, however, only applicable to two-party elections where there was no voter uncertainty. With voter uncertainty, it was still presumed that the mean voter theorem would be valid. The chaos theorem did indicate that in parliaments where the dimension was low and where parties varied in strength, stability would occur, particularly if there were a large centrally located or dominant party. Indirectly, this led to a reawakening of interest in completing Riker's coalition program. Now, the task was to examine the post-election situation in Parliament, taking

xix

Preface

party positions and strengths as given, and to use variants of rational choice theory to determine what government would form. While a number of useful attempts were made in this endeavor, they still provided only a partial solution, since elections themselves lay outside the theory. One impediment to combining a theory of election with a theory of coalition was that the dominant model of election predicted that parties would be indistinguishable—all located at the electoral mean, and all of equal size.

A key theoretical argument of this book is that this mean voter theorem is invalid when voters judge parties on the basis of evaluation of competence rather than just proposed policy. Developing this new theorem came about because of an apparent paradox resulting from work with our colleagues Daniela Giannetti, Andrew Martin, Gary Miller, David Nixon, Robert Parks, Kevin Quinn, and Andrew Whitford. On the basis of logit and probit models of the Netherlands, it was found by simulation that parties could have increased their vote by moving to the center. However, when the same simulation was performed using an empirical model for Israel in 1988, no such convergence was observed. Some later work on the United States then brought home the significance of Madison's remark in Federalist 10 about "the probability of a fit choice." The party constants in the estimations could be viewed as valences, modelling the judgments made of the parties by the electorate. These judgments varied widely in the case of Israel, somewhat less so in Italy and Britain, and even less so in the Netherlands. The electoral theorem presented in Chapter 3 shows that if electoral uncertainty is not too high and electoral judgments are sufficiently varied, parties will, in equilibrium, locate themselves in different political "niches," some of which will be far from the electoral center. Immediately we have an explanation both for the occurrence of radical parties and for Duverger's (1954) hypothesis about the empty electoral center.

This book attempts to combine the resulting theory of elections with a theory of government formation, applicable both to polities with electoral systems based on proportional representation (or PR), such as Israel, Italy, and the Netherlands, but also to polities such as Britain and the United States with electoral systems based on plurality or "first past the post." Essentially we propose that, under PR, pure vote maximization is tempered by the beliefs of party leaders about the logic of coalition formation. Under the plurality electoral mechanism, party coalitions must typically occur before the election, and this induces competition between the activists within each party. Naturally, this model raises many new topics of theoretical concern, particularly since we combine notions of both

Preface

non-cooperative game theory and social choice theory. Because the theoretical model presented here is quite abstract and technically demanding, we suggest that only the first section of Chapter 3 is covered on first reading. The formal sections of this chapter on electoral uncertainty and on the heart can be left for reading after the more substantive chapters have been examined.

Over the years, we have been fortunate to receive a number of National Science Foundation awards, most recently grant SES 0241732. Schofield wishes to express his appreciation for this support and for further support from the Fulbright Foundation, from Humboldt University, and from Washington University during his sabbatical leave from 2002 to 2003. We are also very grateful to the Weidenbaum Center at Washington University for research support. We thank Martin Battle and Dganit Ofek for research collaboration, and Alexandra Shankster, Cherie Moore, and Ben Klemens for help in preparing the manuscript. John Duggan made a number of perceptive remarks on the proof of the electoral theorem. Jeff Banks was always ready with insights about our earlier efforts to develop the formal model. Jim Adams and Michael Laver shared our enthusiasm for modelling the political world.

Our one regret is that Jeffrey Banks, Richard McKelvey, and William Riker are not here to see the results of our efforts. They would all have enjoyed the theory, and Bill, especially, would have appreciated our desire to use theory in an attempt to understand the real world. This book is dedicated to the memory of our friends.

> Norman Schofield and Itai Sened. St. Louis, Missouri, April 14, 2006

xxi