Contents

Pr	Preface				
0	Introduction MOON DUCHIN				
	1 How (not) to spot a gerrymander 2 The universe of possibilities	11 17 24			
1	Explainer: Compactness, by the numbers MOON DUCHIN	29			
Ι	I Political thought				
2	Measuring partisan fairness MIRA BERNSTEIN AND OLIVIA WALCH	39			
	1Proportionality2Partisan symmetry3The efficiency gap4Ensembles and outliers5Conclusion: Debating fairness	49 57 64			
3	Interviews: Concepts of representation MOON DUCHIN AND OLIVIA WALCH	77			
4	Redistricting: Math, systems, or people? KEITH GÅDDIE				
	1 Introduction	88 91			

iv Contents

	6 A people problem, v.2	97
5	Political geography and representation JONATHAN RODDEN AND THOMAS WEIGHILL	101
	1 Introduction	105 109 115 118
II	Law	129
6	Explainer: A brief introduction to the VRA ARUSHA GORDON AND DOUGLAS M. SPENCER	131
7	Race and redistricting ELLEN D. KATZ	137
	1 Introduction	140 145 154
8	Law, computing and redistricting in the 1960s ALMA STEINGART	163
	Against computers	tion 165
9	The law of gerrymandering GUY-URIEL CHARLES AND DOUGLAS M. SPENCER	179
	Backdrop	187 189 196
II	I Geography	199
10	Race, space, and the geography of representation CHRISTOPHER S. FOWLER	201
	1 Introduction	201

<u>Contents</u> v

	3 G	opulation distribution: cause and effect eography on multiple scales	. 211
11		usive geography of communities ETT DASH NELSON	221
	2 Au3 Th	ommunity as a principle of representation	. 222
12	_	ner: Communities of interest HER ROSENFELD AND MOON DUCHIN	235
13	_	aphy as data ACHADOORIAN AND RUTH BUCK	247
	2 Tl3 El4 Gi5 So	troduction	. 248 . 257 . 259 . 266
IV	Mat	h and computer science	273
14	Three a	275	
	2 A₁3 A₁4 A₁	pplication	. 277 . 280 . 285
15	_	ner: Measuring clustering and segregation DUCHIN AND JAMES M. MURPHY	293
16		ricting algorithms IAH BECKER AND JUSTIN SOLOMON	303
	2 Go 3 Go 4 Se	enerating all plans: Enumeration	. 307 . 310 . 320

	DAR	YL DEFORD AND MOON DUCHIN	
	1 2 3 4 5	Overview: Not a solved problem	344 359 376
V	On	the ground	383
18	Mak	ing maps	385
	MEG	AN GALL, KARIN MAC DONALD AND FRED MCBRIDE	
	1 2 3 4 5 6	Introduction The raw materials of a map: Tools and data Drawing the maps Transparency and secrecy Recommendations Conclusion: Democracy takes work!	387 392 401 404
19		rview: Drawing for the courts ON DUCHIN AND OLIVIA WALCH	409
20	-	ainer: Ranked choice voting MAS WEIGHILL AND MOON DUCHIN	415
21		orm on the ground in Lowell, MA	423
	1	Introduction: The VRA as a tool	423
	2	At-large electoral systems: A prime target	
	3	Lowell, Massachusetts: A case study	426
	4	Conclusion: A settlement in Lowell, and next steps	434
22	-	ainer: Race vs. party SHA GORDON	437
23		state of play in voting rights STEN CLARKE AND ARUSHA GORDON	441
	1	How we got here	441
	2 3	Where we're going	447
24	-	ogue: The view from 2022	457