
Reforms II: Gerrymandering

Session 22

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17.263: American Elections

Roadmap

[Districting](#)

[Gerrymandering](#)

[Consequences](#)

[Solutions](#)

Districting

Place-Based Representation

- ▶ A political representative “stands in for” a collection of citizens, but how should those collections be defined?
- ▶ One option is **geography**. What are some alternatives?
- ▶ Because the US uses place-based representation, **people** are represented indirectly via representation of where they live (or vote).
- ▶ This indirectness introduces a distinctive set of distortions and biases into the representational relationship.

The UK Parliament, 1800



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Liverpool (Pop: 77,000, MPs: 2)



Old Sarum (1834) by John Constable. This image is in the public domain. Source: [Web Gallery of Art](#).

Old Sarum (Pop: 7, MPs: 2)

US State Legislatures, 1960

Ratio of Largest to Smallest Population Per Member,
Each House, American State Legislatures, 1960

State	Lower House	Upper House	State	Lower House	Upper House
Alabama	15.6	41.2	Montana	14.0	88.4
Alaska	6.4	10.8	Nebraska	Unicameral	2.7
Arizona	5.3	85.8	Nevada	31.4	223.6
Arkansas	6.4	2.3	New Hampshire	1081.3	3.0
California	6.2	422.5	New Jersey	4.6	19.0
Colorado	8.1	7.3	New Mexico	15.5	139.9
Connecticut	424.5	6.7	New York	14.8	4.0
Delaware	35.4	18.8	North Carolina	19.0	6.0
Florida	108.7	98.0	North Dakota	7.5	9.9
Georgia	98.8	42.6	Ohio	14.5	2.2
Hawaii	2.2	5.9	Oklahoma	14.0	26.4
Idaho	25.5	102.1	Oregon	3.0	3.5
Illinois	3.6	9.4	Pennsylvania	31.1	10.7
Indiana	5.4	4.4	Rhode Island	39.0	141.0
Iowa	17.8	15.0	South Carolina	3.1	25.1
Kansas	33.2	21.3	South Dakota	4.7	5.8
Kentucky	6.0	2.9	Tennessee	23.0	6.0
Louisiana	17.4	8.0	Texas	6.7	9.4
Maine	6.6	2.8	Utah	27.8	6.9
Maryland	12.5	31.8	Vermont	987.0	6.4
Massachusetts	13.9	2.3	Virginia	7.1	5.5
Michigan	4.0	12.4	Washington	4.6	7.3
Minnesota	13.3	5.8	West Virginia	9.0	3.4
Mississippi	16.7	8.8	Wisconsin	3.9	2.8
Missouri	22.2	2.8	Wyoming	3.4	9.8

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One Person, One Vote

- ▶ Legislative districting has traditionally been considered a political question, and judges have been wary to wade into the “political thicket” to interfere with states’ decisions.
- ▶ This changed somewhat in the 1960s, especially with Supreme Court’s landmark decision *Baker v. Carr* (1962), which required that legislative districts have approximately **equal population**.
- ▶ Two indirect consequences of *Baker v. Carr*:
 - ▶ More frequent redistricting (every 10 years at least)
 - ▶ Displacement of traditional districting norms (e.g., respecting county lines)

Race and Redistricting

- ▶ The 1960s also brought much stronger federal protections of **voting rights**, esp. for blacks and other underrepresented groups.
 - ▶ Voting Rights Act of 1965 (and 1970, 1975, 1982, etc.)
 - ▶ Judicial interpretation and enforcement
- ▶ The VRA prohibited districting schemes that “diluted” the political influence of protected racial/ethnic groups.
- ▶ Courts often interpreted this as affirmative duty to create **majority-minority districts** and invalidated plans lacking them.

Partisanship and Redistricting

- ▶ Even after the reapportionment and voting-rights revolutions of the 1960s, courts remained unwilling to strike down plans based on **partisan** criteria.
- ▶ As long as plans didn't run afoul of the VRA (tricky, esp. in South), courts had no problem with plans designed to dilute the influence of the opposition *party*.
- ▶ In the last decade, however, federal (though not Supreme) and esp. state courts have begun invalidating extreme partisan gerrymanders (e.g., PA and NC).

State-Specific Rules and Institutions

The institutions and rules governing the districting process differ substantially across states (and between legislative and congressional).

- ▶ Who draws the (legislative) lines?
 - ▶ Legislature + governor (26)
 - ▶ Legislature alone (10)
 - ▶ Independent commission (8)
 - ▶ Political commission (6)
- ▶ Criteria:
 - ▶ Contiguity
 - ▶ Political boundaries
 - ▶ Compactness
 - ▶ Communities of interest
 - ▶ Political outcomes

Gerrymandering

Eldridge Gerry's Salamander



The Gerry-Mander by Elkanah Tisdale. This image is in the public domain.

Conflicting Incentives

In addition to institutional and legal constraints, redistricters face possibly competing incentives.

- ▶ **Personal:** Maximize probability of reelection.
- ▶ **Partisan:** Maximize probability of party majority.

How might these incentives conflict?

North Carolina: A Persistent Example

% Slave, 1860



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Dem-Controlled, 1983



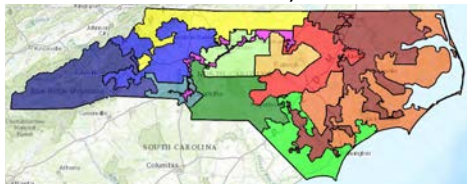
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Dem-Controlled, 1872



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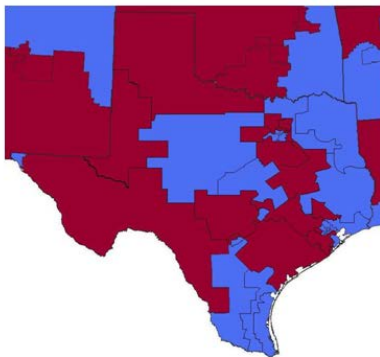
Court-Ordered, 1993



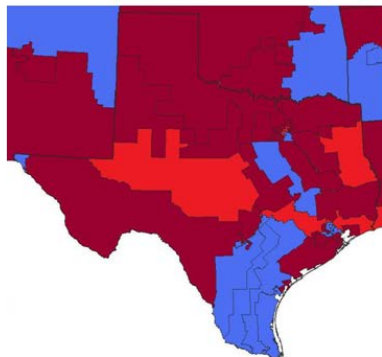
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Texas 2003: A Harbinger

2002 Election Results



2004 Election Results

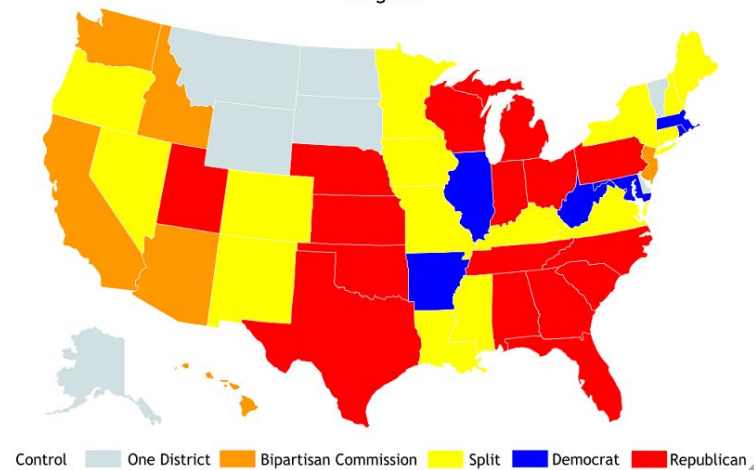


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The 2010 Elections

United States Redistricting Control

Congress



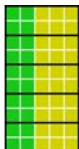
Source: [Micah Altman & Michael McDonald / The Public Mapping Project](#). License CC BY.

Partisan Bias in Theory

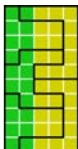
50 Precincts
60% Yellow
40% Green



Disproportionate Outcomes
"gerrymandering"



5 DISTRICTS
5 Yellow
0 Green
YELLOW WINS ALL



5 DISTRICTS
3 Green
2 Yellow
GREEN WINS MAJORITY

Proportionate Outcomes

50 Precincts
are to be
apportioned
into
5 districts,
10 precincts
each district.

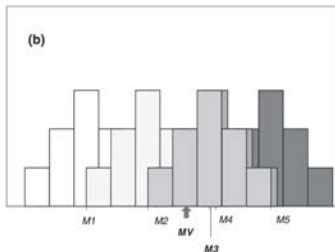
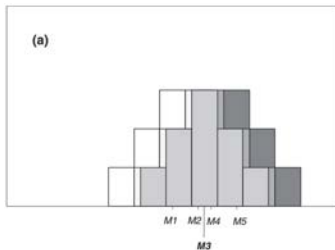


5 DISTRICTS
3 Yellow
2 Green



5 DISTRICTS
3 Yellow
2 Green

Green and yellow win in proportion to their voting



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Partisan Bias in Practice

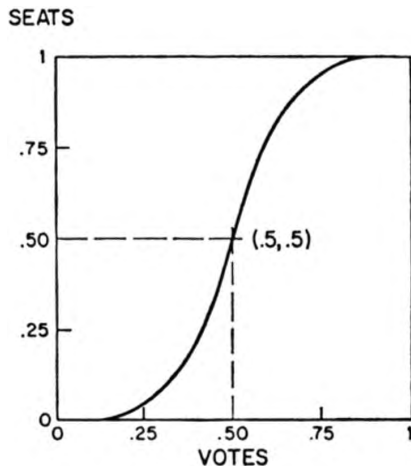
Measures of partisan bias:

- ▶ **Proportional** representation?

Partisan Bias in Practice

Measures of partisan bias:

- ▶ Proportional representation?



$$\frac{S}{1-S} = \left(\frac{V}{1-V}\right)^3$$

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Partisan Bias in Practice

Measures of partisan bias:

- ▶ **Proportional** representation?
- ▶ **Mean–median** difference

	← 2010	November 6, 2012	2014 →
All 435 seats in the United States House of Representatives and all 6 non-voting delegates			
218 seats needed for a majority			
			
Leader	John Boehner		Nancy Pelosi
Party	Republican		Democratic
Leader since	February 2, 2006		January 3, 2003
Leader's seat	Ohio-8th		California-12th
Last election	242 seats, 51.7% ^[1]		193 seats, 44.9%
Seats won	234		201
Seat change	▼ 8		▲ 8
Popular vote	58,228,253		59,645,531
Percentage	47.6%		48.8%
Swing	▼ 4.1%		▲ 3.9%

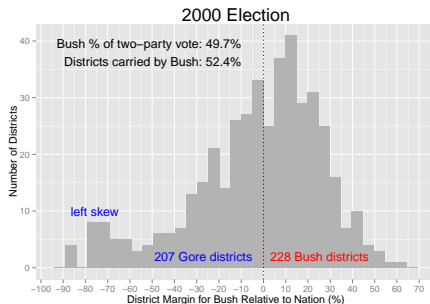
$$R \text{ median} - \text{mean} = +5.1\%$$

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Partisan Bias in Practice

Measures of partisan bias:

- ▶ **Proportional** representation?
- ▶ **Mean–median** difference
- ▶ Bias in **tied** election



Republican bias = +2.7%

Partisan Bias in Practice

Measures of partisan bias:

- ▶ **Proportional** representation?
- ▶ **Mean–median** difference
- ▶ Bias in **tied** election
- ▶ **Efficiency gap** (difference in % of “wasted” votes)”

$$EG = S - .5 - 2(V - .5)$$

When $V = .5$, EG is simply the size of the focal party’s majority/minority.

+20% Republican

Votes for Republican candidates were wasted at a rate 20.3% lower than votes for Democratic candidates.

How Does This Plan Compare?

This plan is more skewed than 99% of the enacted plans we have analyzed nationwide.

The efficiency gap is the difference between the parties’ respective wasted votes in an election divided by the total number of votes cast. [Learn more about the Efficiency Gap.](#)



Efficient Votes and Wasted Votes



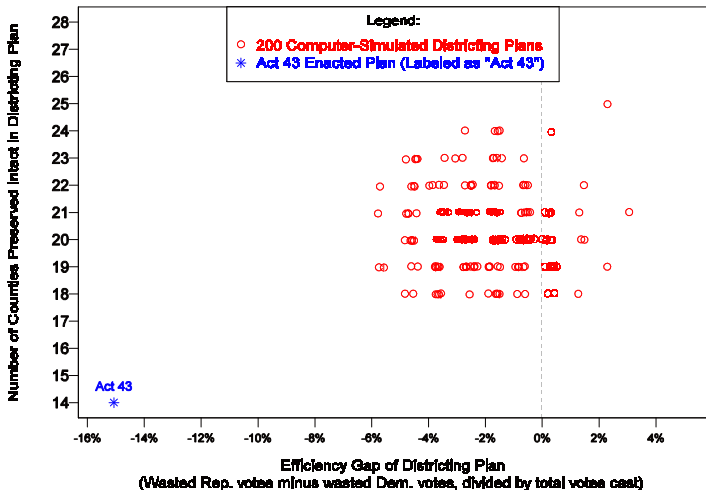
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Distinguishing Intentional and “Natural” Gerrymanders

FIGURE 5

The Wisconsin State Legislature, 2012–2020

Comparison of Simulated Districting Plans to Act 43
On Efficiency Gap and Preservation of County Boundaries



Stephanopoulos, Nicholas. "The Research That Convinced SCOTUS to Take the Wisconsin Gerrymandering Case, Explained." July 11, 2017. Vox. © Vox Media, LLC. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

Consequences

Polarization

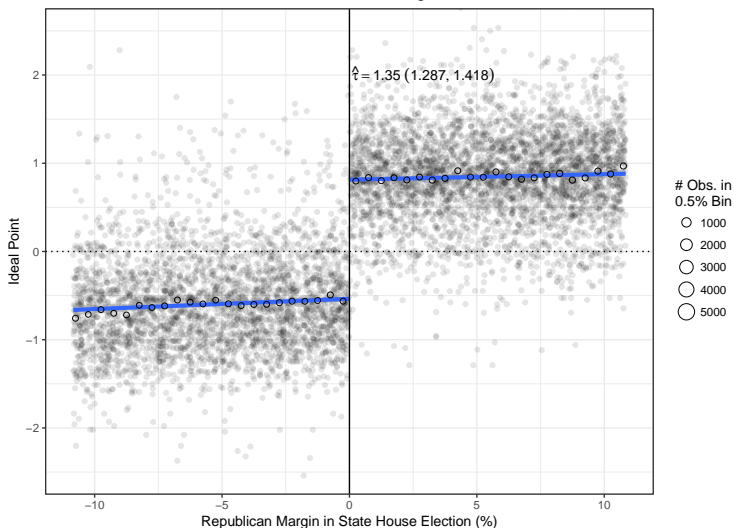
The idea that gerrymandering explains polarization appeals to many people (we want all “bads” to go together).

- ▶ What’s the logic behind this belief?
- ▶ What’s wrong with this logic?

Gerrymandering may not explain polarization, but polarization exacerbates the effects of gerrymandering.

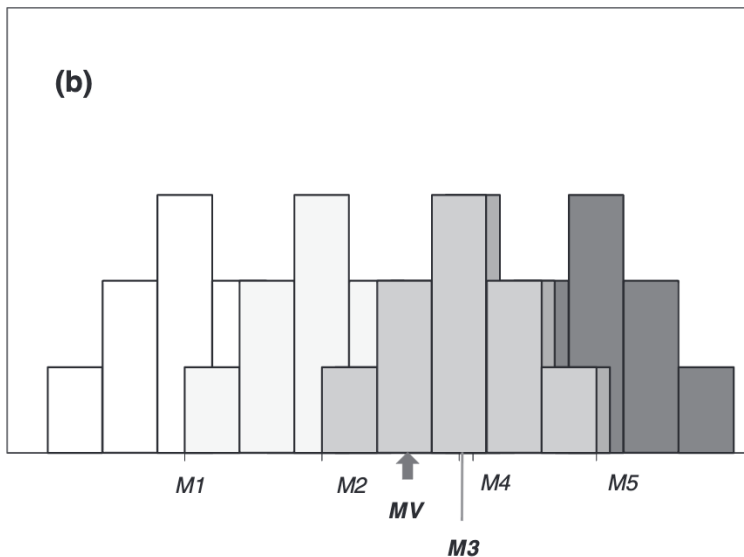
Intradistrict Divergence

Effect of Partisan Selection on State Legislators' Ideal Points



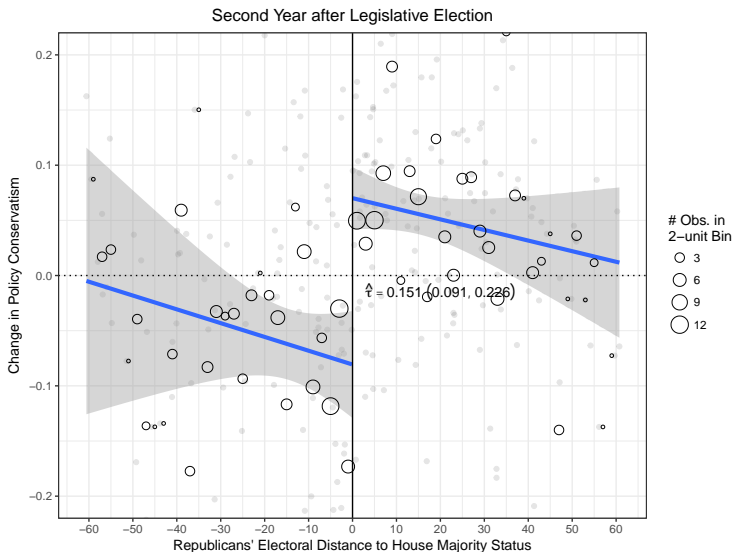
Caughey, Devin, Chris Tausanovitch, and Christopher Warshaw. "Partisan Gerrymandering and the Political Process: Effects on Roll-Call Voting and State Policies." *Election Law Journal: Rules, Politics, and Policy* 16, no. 4 (2017): 453–69. © Mary Ann Liebert, Inc. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

Gerrymandering with Partisan Divergence



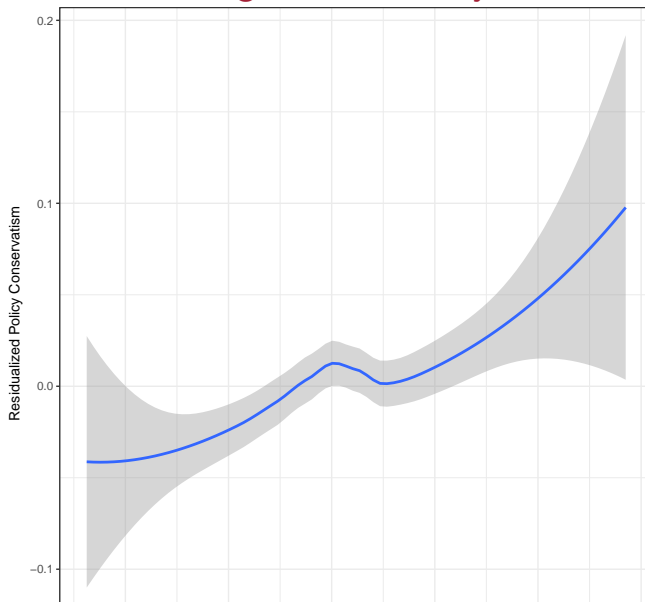
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The Policy Effects of a Legislative Majority



Caughey, Devin, Chris Tausanovitch, and Christopher Warshaw. "Partisan Gerrymandering and the Political Process: Effects on Roll-Call Voting and State Policies." *Election Law Journal: Rules, Politics, and Policy* 16, no. 4 (2017): 453–69. © Mary Ann Liebert, Inc. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

Districting Bias \rightarrow Policy Bias



Caughey, Devin, Chris Tausanovitch, and Christopher Warshaw. ["Partisan Gerrymandering and the Political Process: Effects on Roll-Call Voting and State Policies."](#) *Election Law Journal: Rules, Politics, and Policy* 16, no. 4 (2017): 453-69. © Mary Ann Liebert, Inc. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

Solutions

Prospects for Mitigating Gerrymandering

With increasingly sophisticated software and data and unravelling norms of restraint, parties will likely be even more aggressive in gerrymandering. What might prevent this?

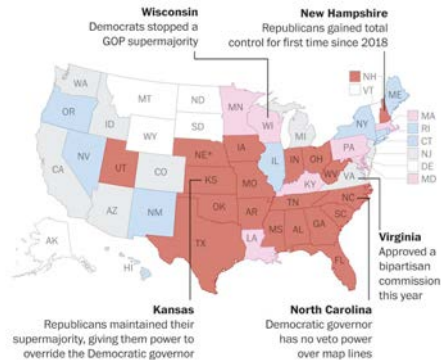
- ▶ Independent commissions
- ▶ Judicial intervention
- ▶ The political process

Looking Forward to the 2020 Cycle

Republicans will control House maps in 19 states

In most states, the legislative body and the governor will control the redrawing of U.S. House district lines in 2021.

- Republican control
- Democratic control
- Mixed control
- Independent commission
- Current single-district states (could change)



* Single, nonpartisan legislative body, effectively controlled by Republicans.

Sources: National Conference of State Legislatures

THE WASHINGTON POST

Phillips, Amber. "Where Democrats Will Be Locked Out of Power in Redistricting Battles Next Year," *Washington Post*, November 11, 2020. © The Washington Post. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <https://ocw.mit.edu/help/faq-fair-use/>.

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