

# (Un)Fairness of Electoral Rules

PMCb1012 Elections and campaigning

# Elections

- A necessary but not a sufficient condition for democracies
- Various benefits:
  - Accountability
  - Representation
  - Legitimacy
  - A peaceful transfer of power (unlike a military coup)
  - Civic mobilization
- **Only free and fair elections fulfil this role**

# Fairness in Elections

- What is fair / unfair?
- Binary options or a scale?
- Guarantee that elections are conducted in a fair manner
  - Role of electoral rules
- Equal opportunities for those who participate:
  - Voters
  - Political parties / candidates



# Gerrymandering

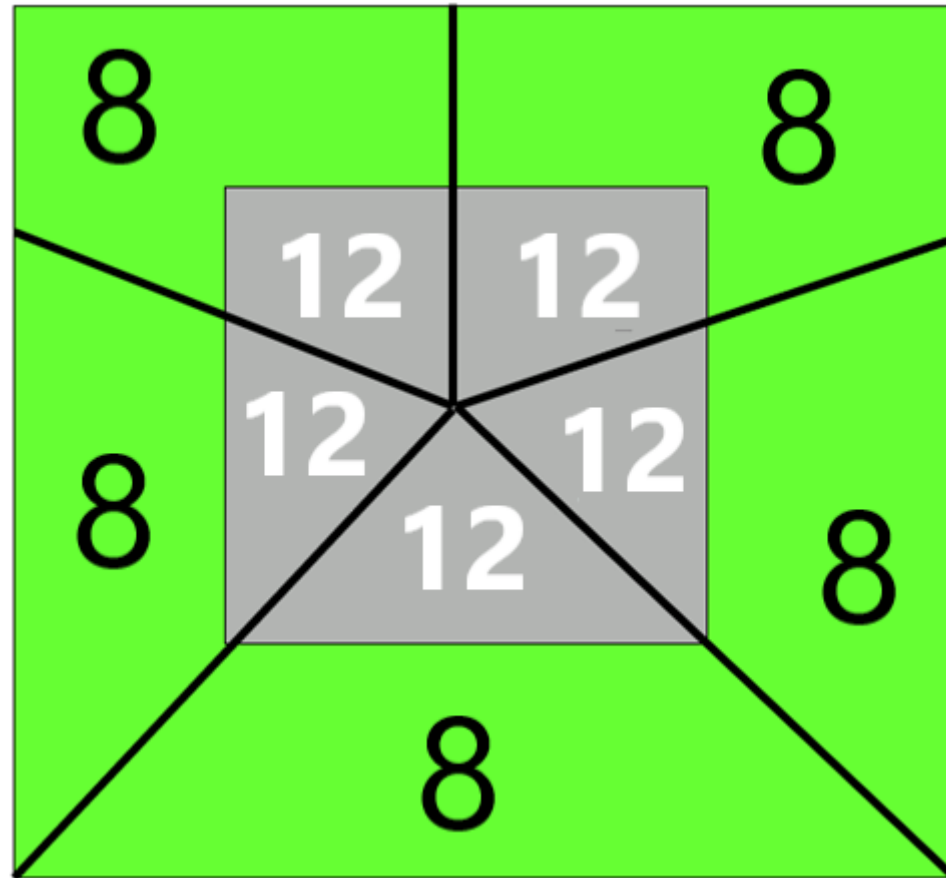
# Electoral Districts

- A key feature of electoral systems
- Number and size (number of seats) of districts and their impact
- Importance of geography:
  - Who selects the borders?
  - Based on what interests?

# Election to assembly (5 seats)

- Description of the region:
  - Consists of a town (60 people) and the countryside (40 people)
  - Town inhabitants support political party A
  - People outside the town support political party B
- FPTP system with 5 single-member districts
  - Each district includes 20 voters – 12 from the town and 8 from the countryside
- As a result in each district party A wins with 12 votes over party B

# Election to assembly (5 seats)



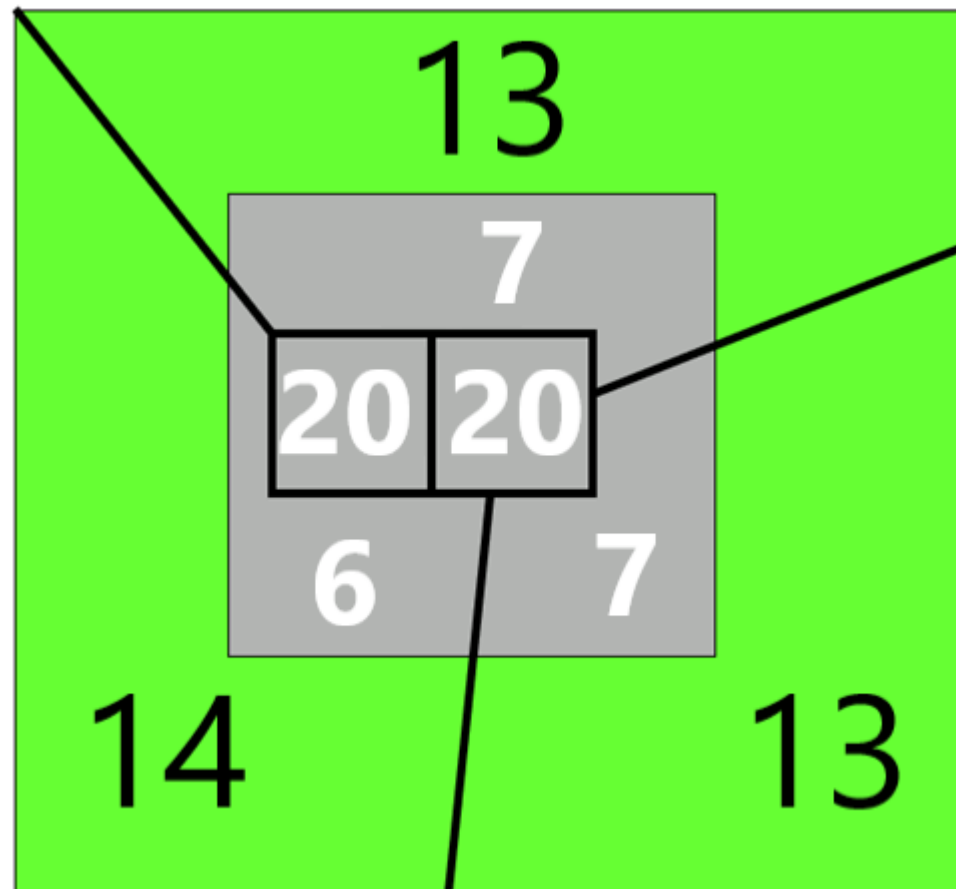
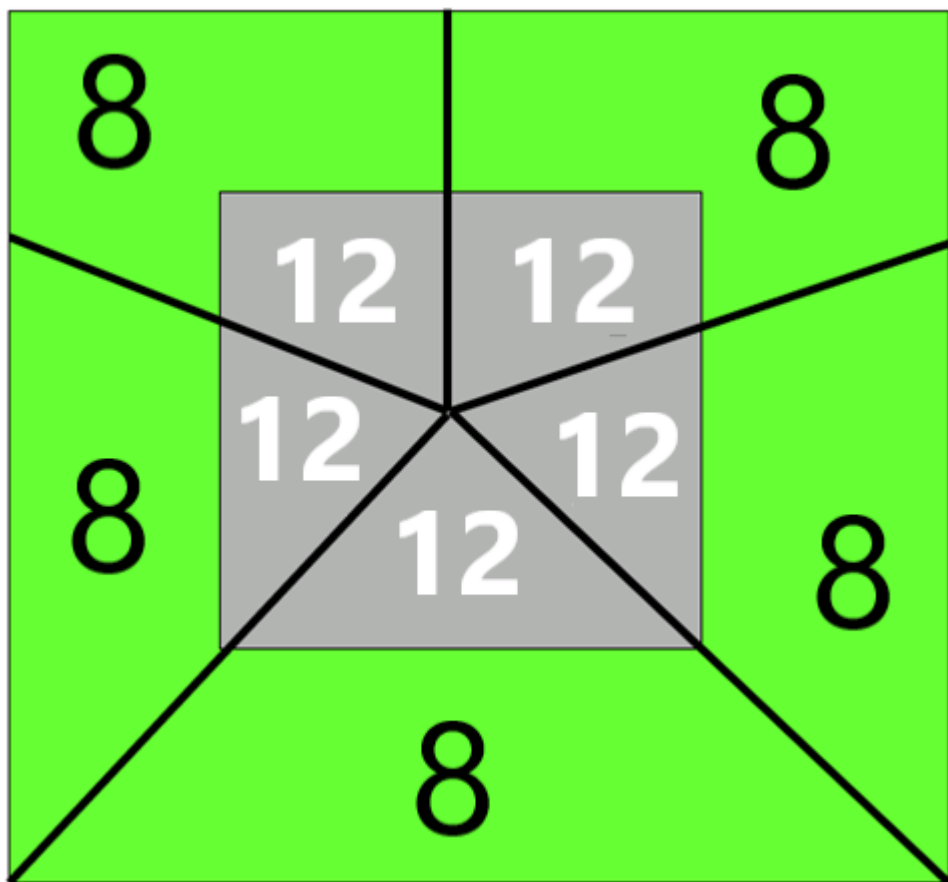
# Results

District	Party A	Party B	Winner
1	12	8	A
2	12	8	A
3	12	8	A
4	12	8	A
5	12	8	A

Party	Votes	Seats	Win
A	60	5	
B	40	0	



What if we redraw the borders?



# Before

District	Party A	Party B	Winner
1	12	8	A
2	12	8	A
3	12	8	A
4	12	8	A
5	12	8	A

Party	Votes	Seats	Win
A	60	5	
B	40	0	

# After

District	Party A	Party B	Winner
1	20	0	A
2	20	0	A
3	7	13	B
4	7	13	B
5	6	14	B

Party	Votes	Seats	Win
A	60	2	
B	40	3	

# Gerrymandering

- Tactical approach in drawing district borders
- Goals:
  - Strategic division of the electorate into closed districts
  - To tie the electorate of rivals into excessively large concentrations
  - Exhaust the opponent's potential by fewer unnecessarily high victories
- Absurd territorial units can arise as a consequence

# The Origin



- Elbridge Gerry (1744-1814):
  - Governor of Massachusetts
  - How to pronounce? (<https://www.youtube.com/watch?v=Rp0Qz19nIG4>)

# Key issues

- Gerrymandering is a completely legal process
- Basically no violation of the equality of the right to vote
- Ethical aspects
- A political game on naivety

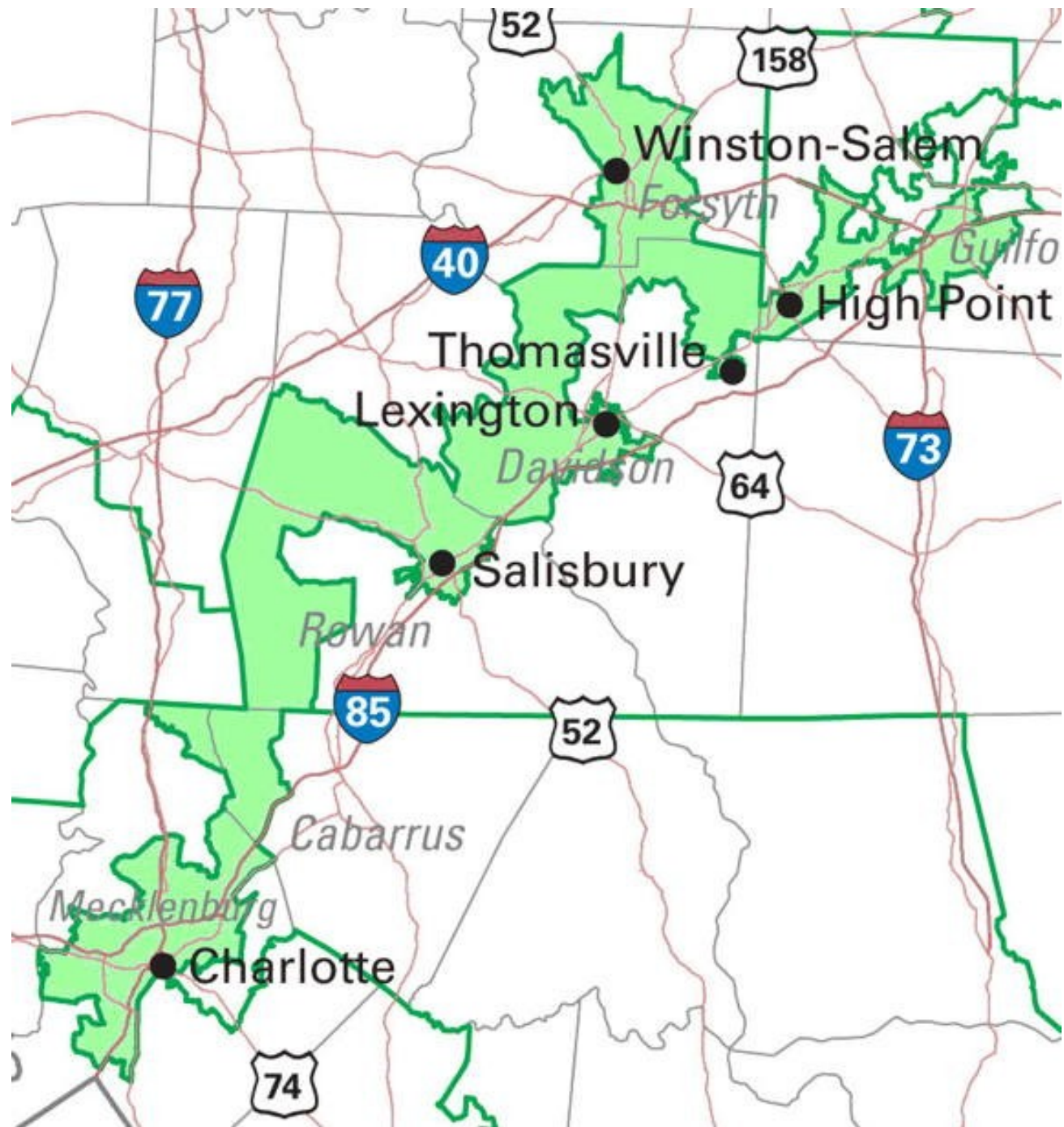
# Which Electoral Systems?

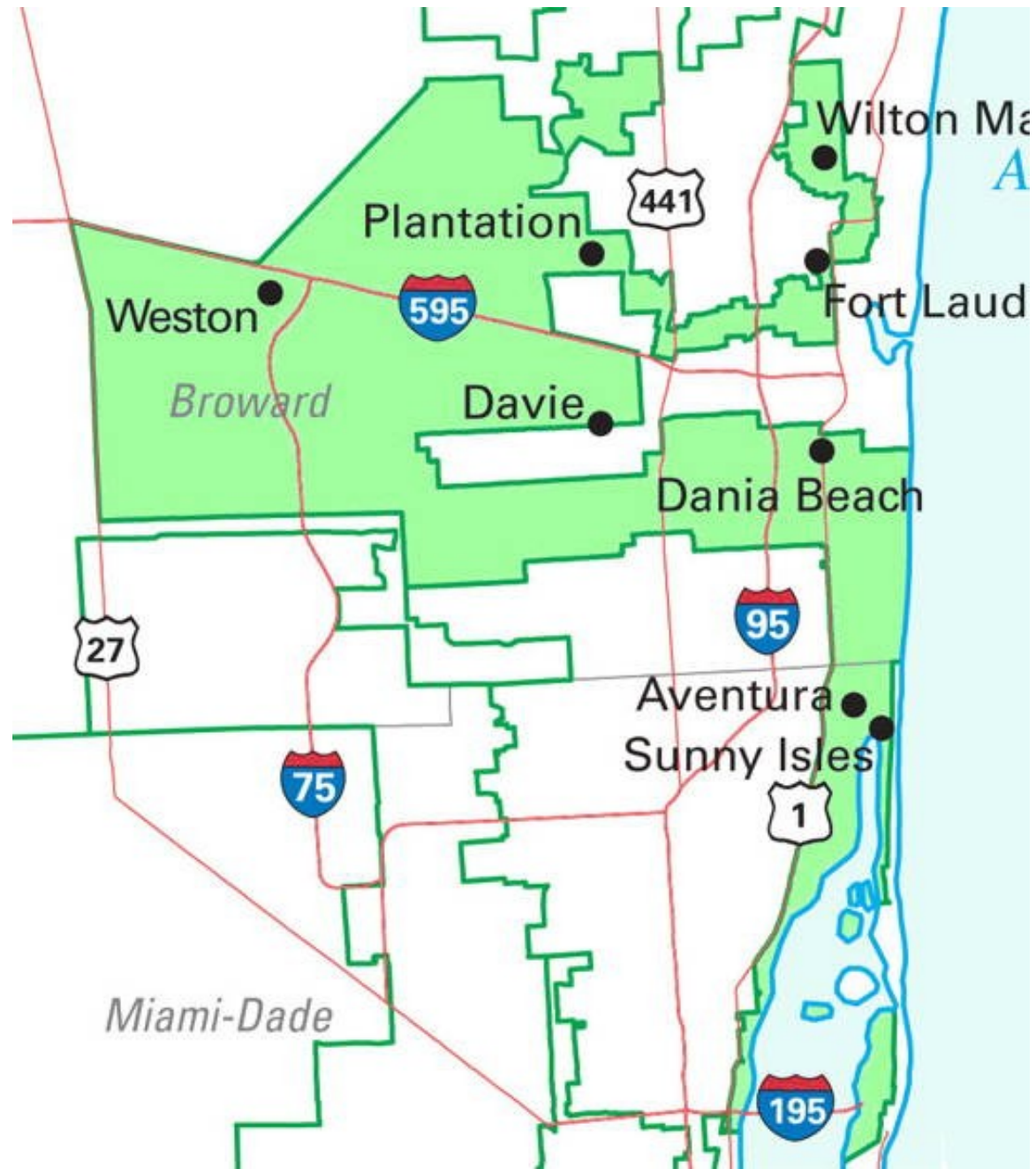


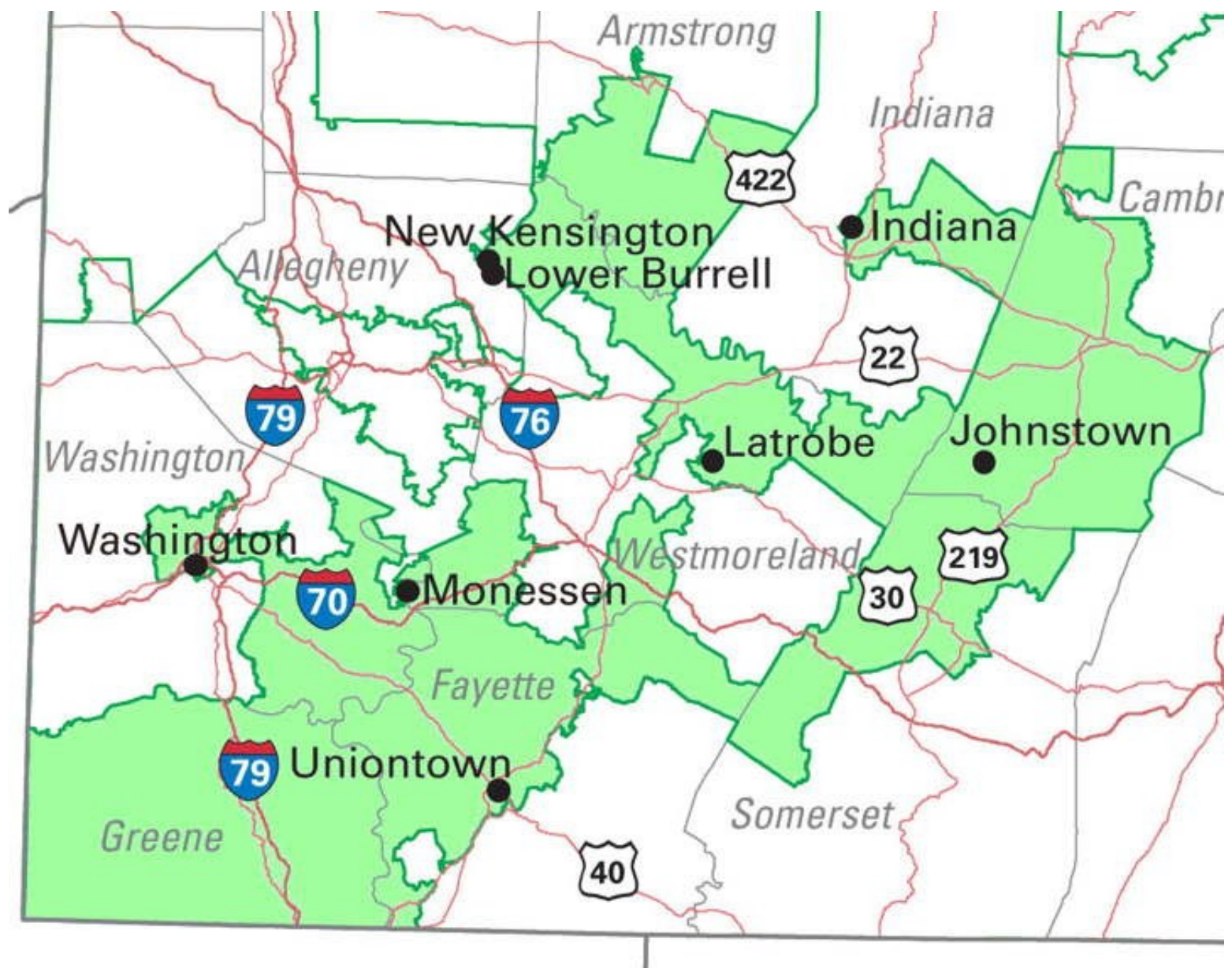
# Gerrymandering Today

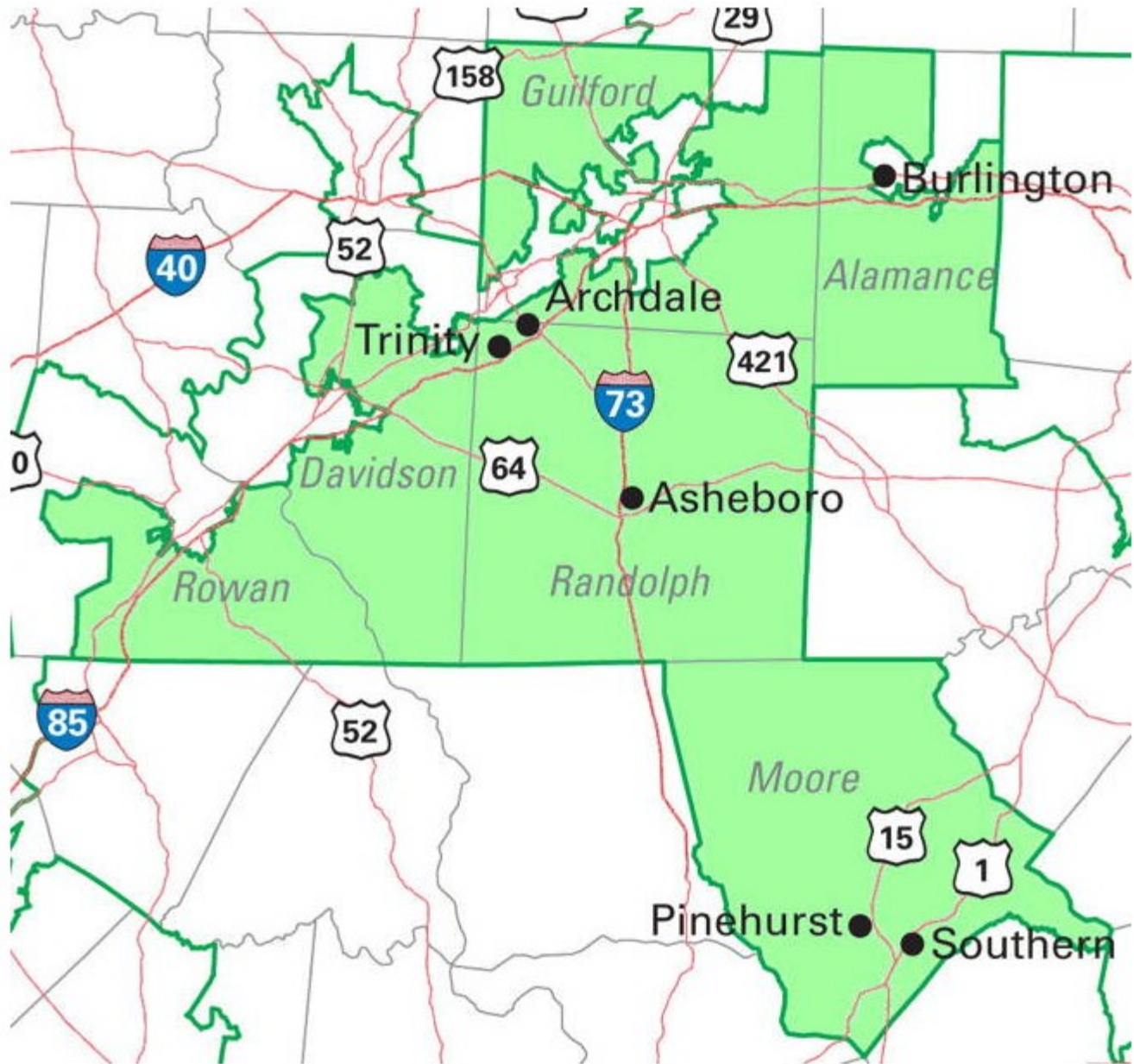
- Availability of data
- Computers / AI
- Attempts to eliminate gerrymandering

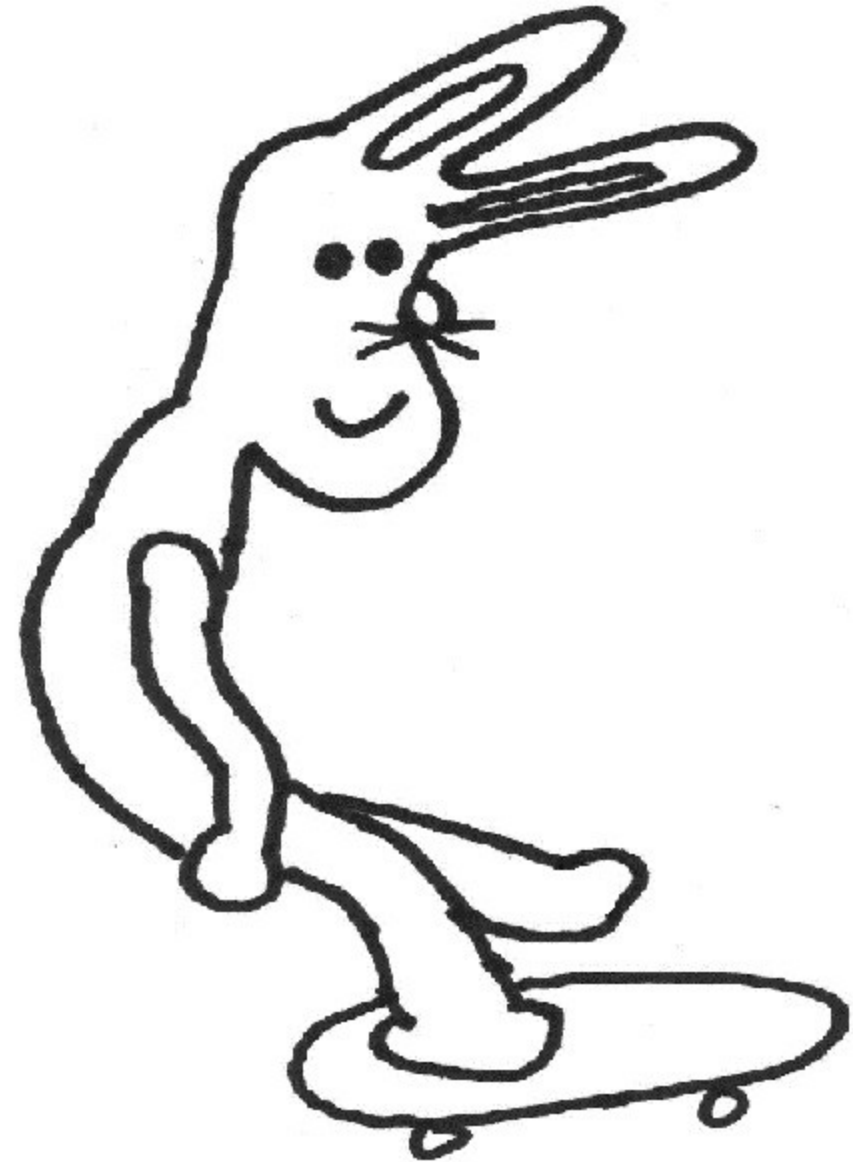
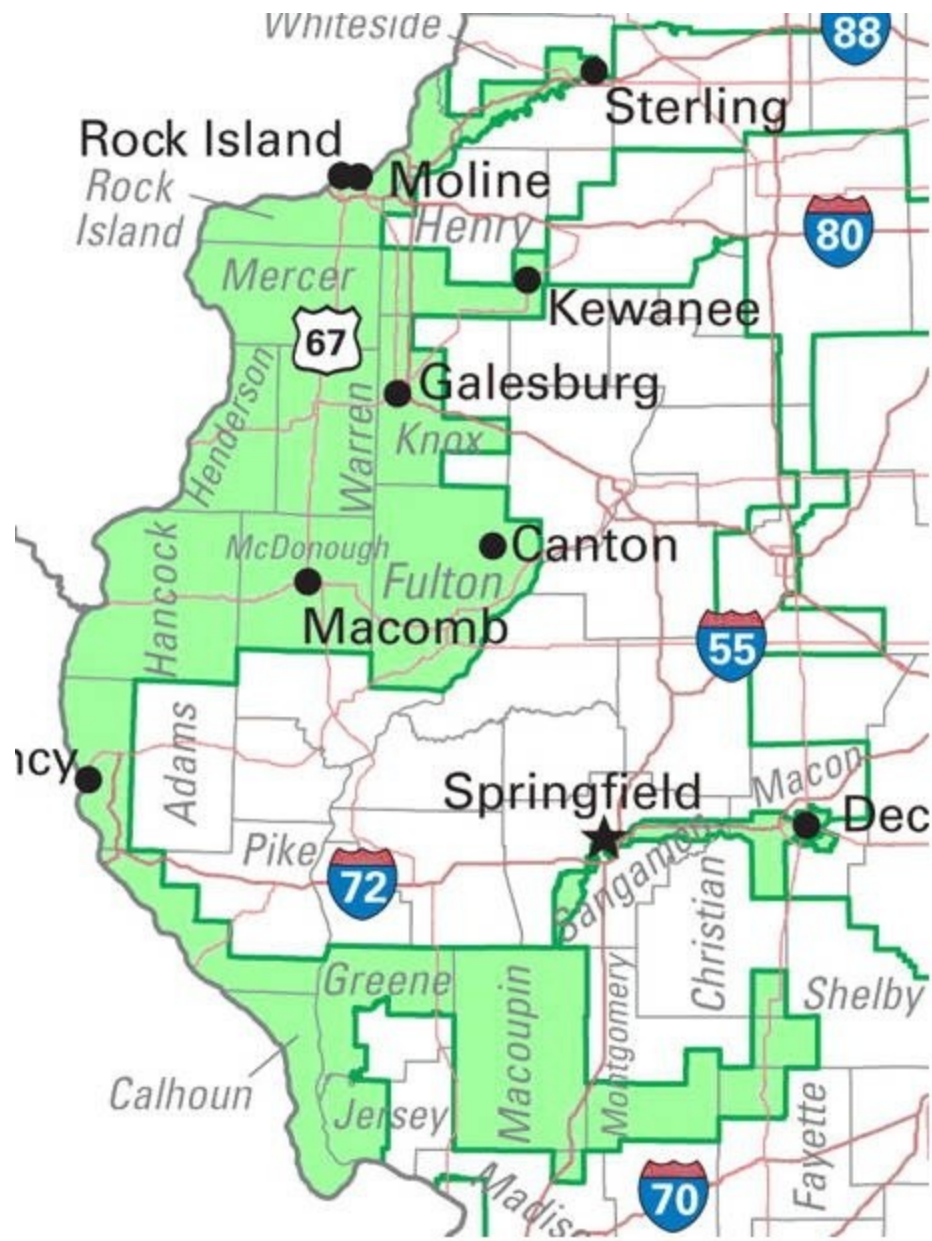


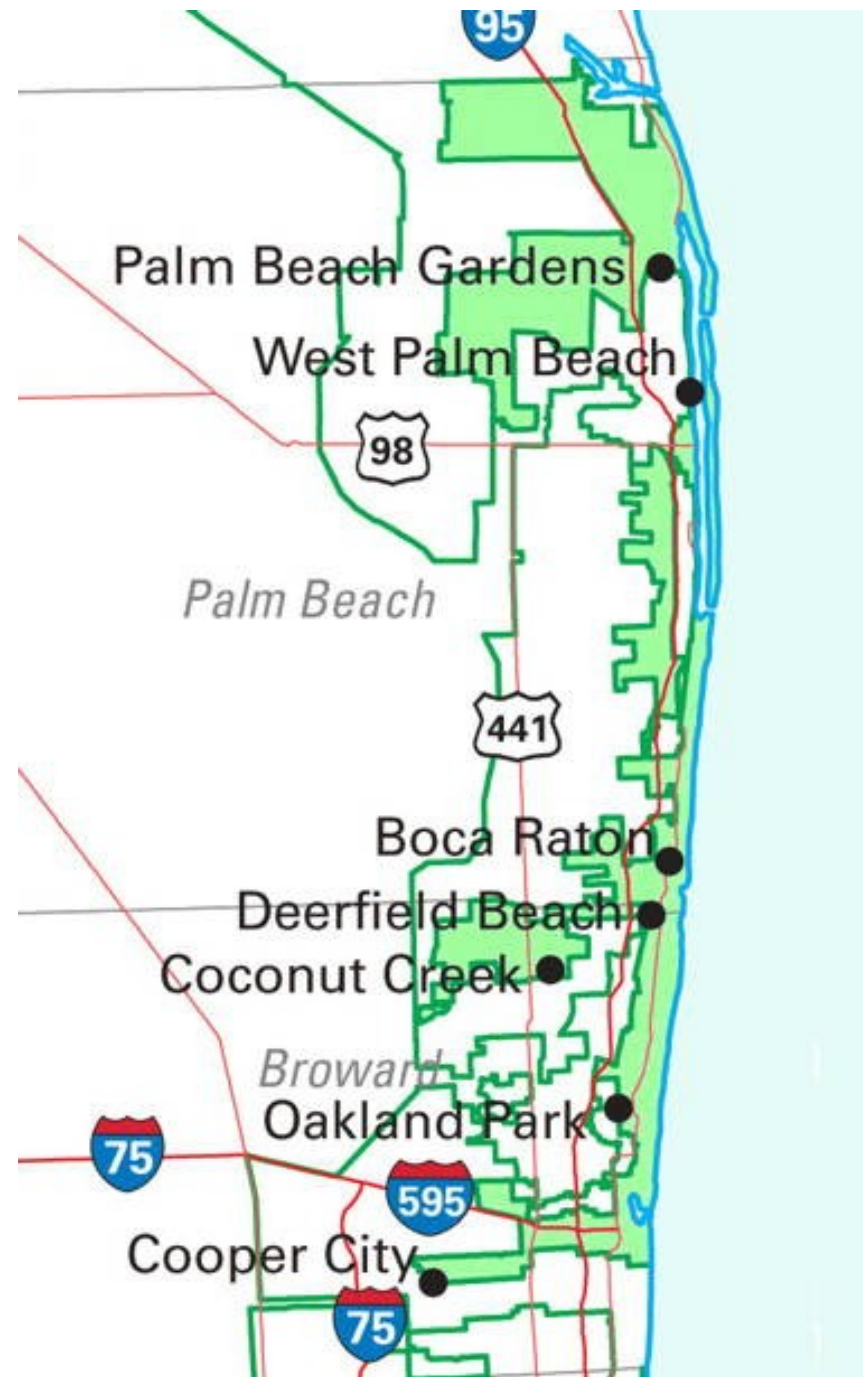




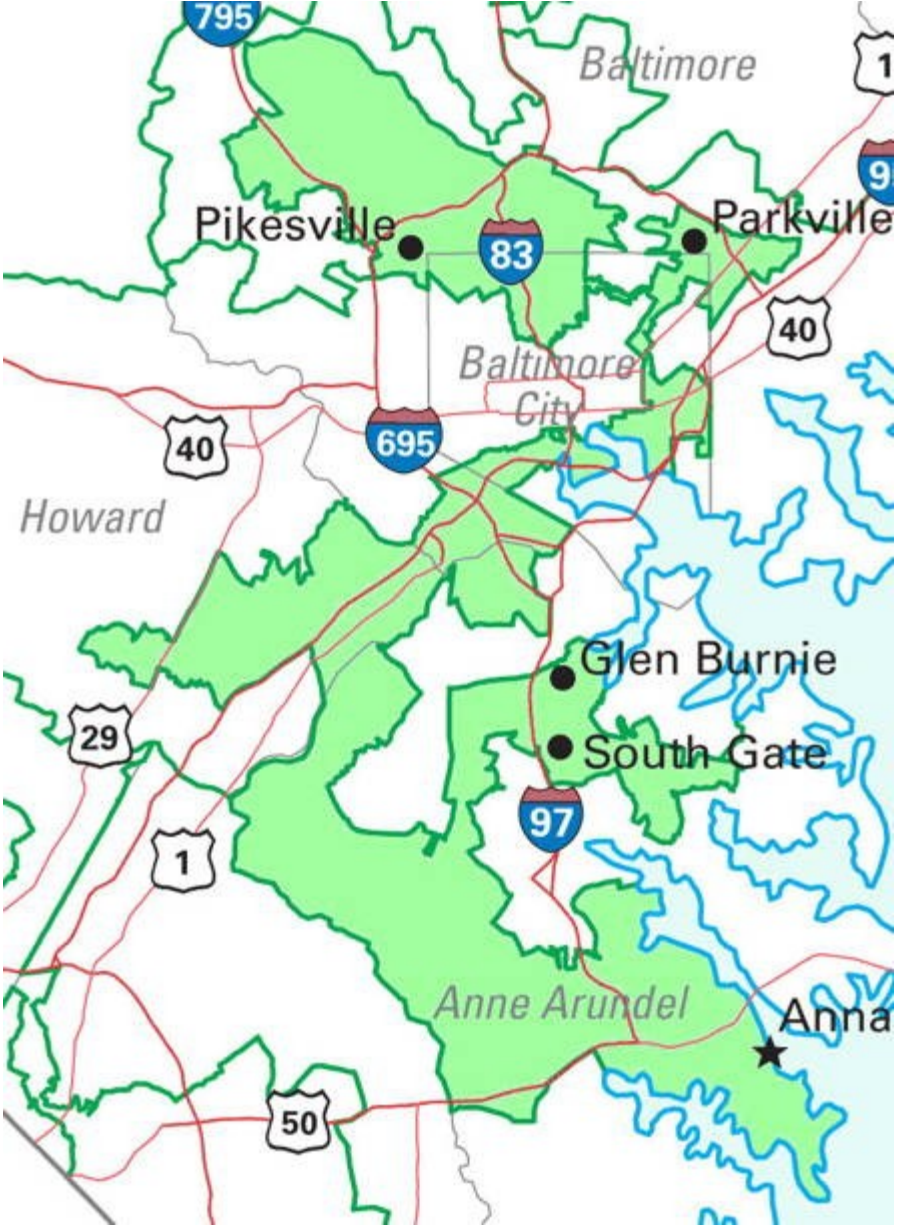




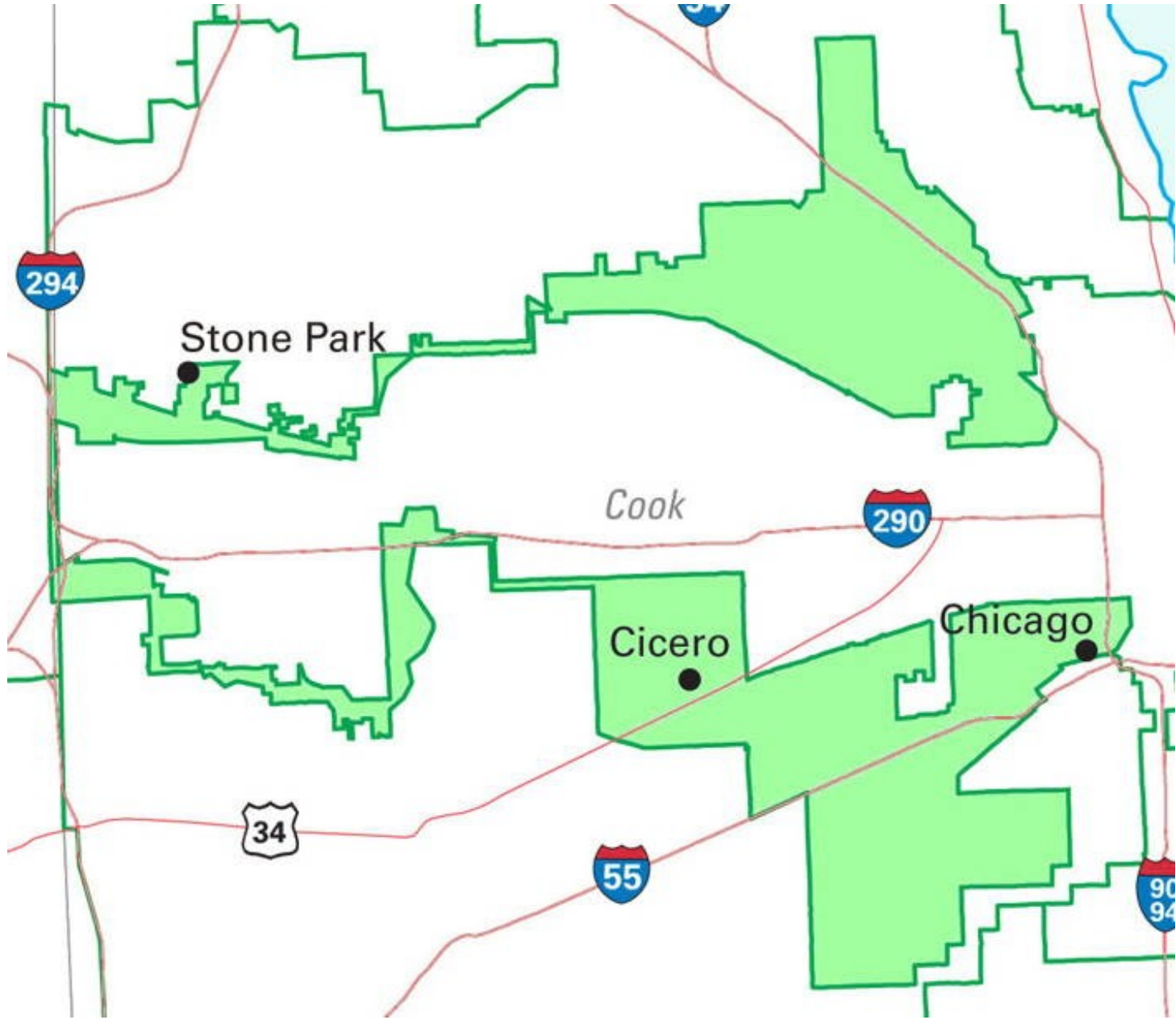














# Ballot ranking

# Ballot Order Effect

- List of candidates is not only a technical issue
- Ranking as a key predictor of vote gains (and losses)
- More complex lists lead to voters using cognitive shortcuts
- Especially applies for less salient elections

# Satisficing Theory

- Sub-optimal decisions of voters
- Interest of voters fades with every subsequent option
- Result:
  - Primacy effect – more votes given to top candidates
  - Recency effect – more votes given to last candidates

# Other Explanations

- 'Good citizenship'
  - Turnout as an issue of its own value
  - Social pressure
- Complicated electoral rules
  - Alternative vote (Australia)
  - Donkey voting – ascending/descending grading of candidates

## HOW TO VOTE 1

# VANESSA RAULAND

## FOR CANNING



### STANDING UP FOR WHAT MATTERS

You must number every box for your vote to count.

No ticks or crosses.

PLACE A '1' IN THIS BOX, THEN NUMBER ALL OTHER BOXES.



Authorised by Jess McColl on behalf of The Greens (WA), 445 Hay St, Perth, 6000  
Printed by The Environmental Printing Company, 2/20-24 Commerce St, Malaga WA 6090

#### HOUSE OF REPRESENTATIVES

- 6 SHARMA, Vimal Kumar  
Palmer United Party
- 8 WHITTLE, Connor  
Liberal Democrats
- 2 ALLEN, Michelle  
Pirate Party
- 7 SMITH, Greg  
Australian Defence Veterans Party
- 3 LOVE, Katrina  
Animal Justice Party
- 9 HASTIE, Andrew  
Liberal
- 12 VAN LIESHOUT, Teresa  
Independent
- 4 KEOGH, Matt  
Australian Labor Party
- 1 RAULAND, Vanessa  
The Greens (WA)**
- 10 McCOURT, Jim  
Family First Party
- 11 VAN BURGEL, Jamie  
Australian Christians
- 5 SMITH, Angela  
Sustainable Population Party

## Dr Kerry Phelps Independent Wentworth

## Vote Kerry Phelps















### How to vote for Dr Kerry Phelps

- 16 CALLANAN, Robert  
KATTER'S AUSTRALIAN PARTY
- 12 KANAK, Dominic Wy  
THE GREENS
- 9 HIGSON, Shayne  
VOLUNTARY EUTHANASIA PARTY
- 14 GEORGANTIS, Steven  
AUSTRALIAN PEOPLES PARTY
- 11 MURRAY, Tim  
AUSTRALIAN LABOR PARTY
- 3 FORSYTH, Ben  
DERRYN HINCH'S JUSTICE PARTY
- 15 ROBINSON, Tony  
AUSTRALIAN LIBERTY ALLIANCE
- 13 GUNNING, Samuel Joseph  
LIBERAL DEMOCRATS
- 10 SHARMA, Dave  
LIBERAL PARTY
- 7 VITHOULKAS, Angela  
INDEPENDENT
- 4 DOYLE, Deb  
ANIMAL JUSTICE PARTY
- 5 LEONG, Andrea  
SCIENCE PARTY
- 8 HEATH, Licia  
INDEPENDENT
- 6 KELDOULIS, Barry  
THE ARTS PARTY
- 1 PHELPS, Kerry  
INDEPENDENT**
- 2 DUNNE, Kay  
SUSTAINABLE AUSTRALIA

Place a  in this box

Remember... number every box to make your vote count

Authorised by Wendy McCarthy AO, 7/20 Wylde St, Potts Point NSW 2011  
Printed by Enviro Press Australia, 8-10 Frank St, Wetherill Park NSW 2164

<p><b>Baird, Shiona</b> 9 Heaven's Gate, Clifftop, LN18 4XS SCOTTISH GREEN PARTY</p>		
<p><b>Canavan, Dennis</b> 14c Love Lane, Linford, LN1 4PD INDEPENDENT</p>		
<p><b>Fox, Colin</b> 386 Burns Drive, Linford, LN5 7RF SCOTTISH SOCIALIST PARTY</p>		
<p><b>Goldie, Annabel</b> 55 Camellia Crescent, Linford, LN8 3DK SCOTTISH CONSERVATIVE AND UNIONIST PARTY</p>		
<p><b>Jamieson, Cathy</b> 16 Thames Close, Bromham, AB13 4EF SCOTTISH LABOUR PARTY</p>		
<p><b>Lochhead, Richard</b> 70 Rock Close, Bromham, AB21 12WX SCOTTISH NATIONAL PARTY</p>		
<p><b>MacDonald, Margo</b> 12 Grafton Grove, Bromham, AB12 3CD INDEPENDENT</p>		
<p><b>McConnell, Jack</b> 24 Wallace Walk, Linford, LN4 9BY SCOTTISH LABOUR PARTY</p>		
<p><b>McLetchie, David</b> 94 Highland Grove, Bromham, AB18 9QR SCOTTISH CONSERVATIVE AND UNIONIST PARTY</p>		
<p><b>Peacock, Peter</b> 6 South Africa Road, Horwood, N1 3FG SCOTTISH LABOUR PARTY</p>		
<p><b>Stephen, Nicol</b> 25 Trebor Road, Horwood, N1 9TV SCOTTISH LIBERAL DEMOCRATS</p>		
<p><b>Sturgeon, Nicola</b> 6 Sea Grove, Horwood, N1 6MN SCOTTISH NATIONAL PARTY</p>		
<p><b>Swinney, John</b> 6 Post Office Grove, Bigtown, KL1 6MN SCOTTISH NATIONAL PARTY</p>		
<p><b>Wallace, Jim</b> 6 South Road, Bigtown, KL1 3FG SCOTTISH LIBERAL DEMOCRATS</p>		



# Is Ballot Order Effect a Problem?

- NO (partially)
  - Political parties decide the ranking of their candidates
  - Ranking as a result of selection process (primaries etc.)
- YES:
  - If the candidates are ranked according to a criteria which has nothing to do with their qualities



A B C D E F G

H I J K L M N

O P Q R S T U

V W X Y Z

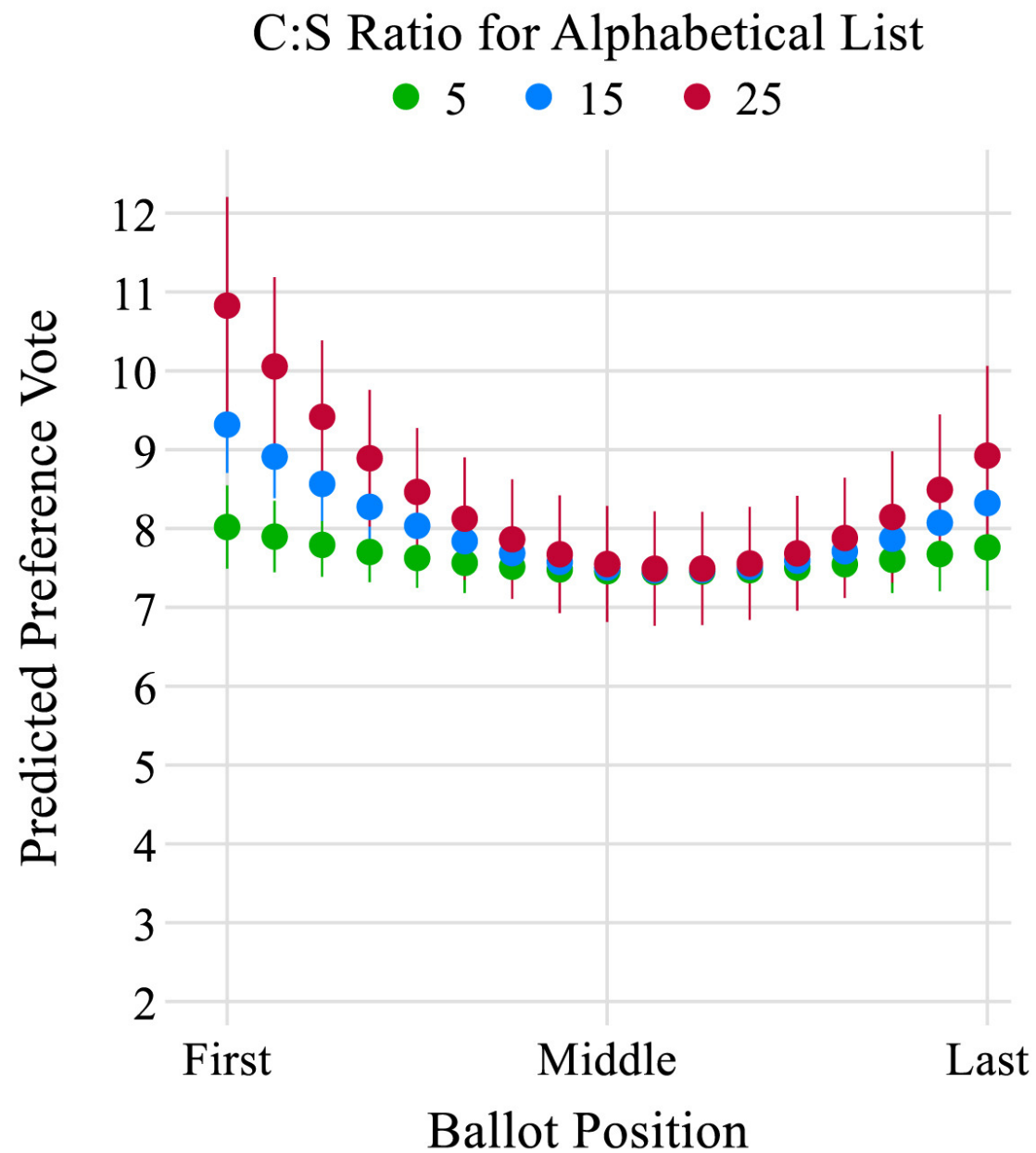
# Alphabet

- A seemingly neutral ranking of letters in daily use
- Names of people, towns, streets, companies,...candidates
- Ballot order effect → alphabetical ranking is not neutral
- A threat to equal chances of candidates?

# Why is Alphabet a Problem?

- **Ranking of candidates based on a random criteria**
  - Why not height, hair colour, age, favourite movie?
- **Alphabet has nothing to do with quality of candidates**
  - Is Jane a better candidate than Sophie?
  - Is Maurice a worse candidate than Ben?
- **Unequal chances of candidates to be at the top/bottom of lists**
  - If your name starts with 'M', what are the odds you will be number 1 on the list?

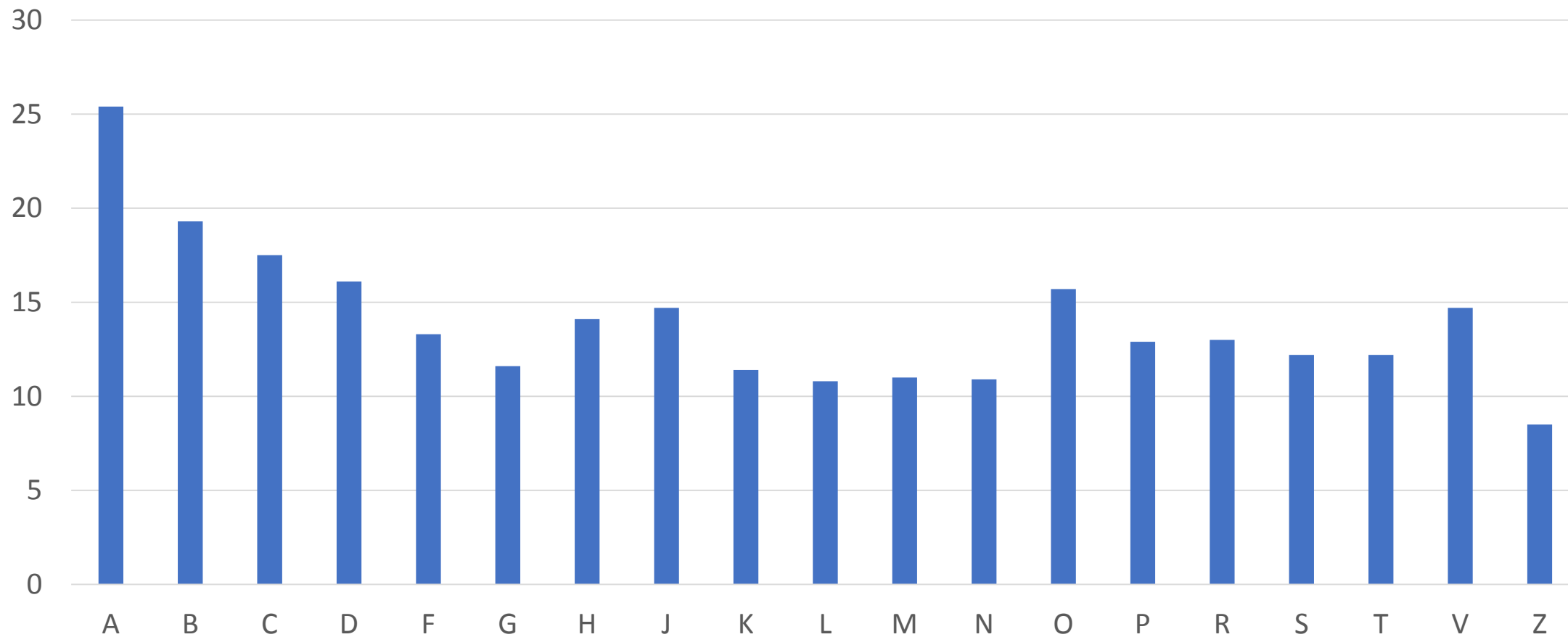
# Elections in Finland



# Regional Elections in Slovakia



# Regional Elections in Slovakia



# Experiment

(Jusko, Spáč, Voda 2019)



	Voters with list A-B	Voters with list B-A	All voters
First position on list	60	40	100
Second position on list	40	60	100
Total	100	100	200
Results: candidate A (120 votes), candidate B (80 votes)			

# Experiment

(Jusko, Spáč, Voda 2019)

# UNFAIR

	Voters with list A-B	Voters with list B-A	All voters
First position on list	65	45	<b>110</b>
Second position on list	35	55	<b>90</b>
Total	100	100	200
Results: candidate <b>A</b> (120 votes), candidate <b>B</b> (80 votes)			



# Experiment

(Jusko, Spáč, Voda 2019)

