

# Partisan Gerrymandering and the Supreme Court

The Role of Social Science

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**PPIC**

PUBLIC POLICY  
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# Outline

- Legal status quo ante
- The opportunity
- The proposed metrics
- *Gill v Whitford*
- Where next?

# Legal status quo ante

- *Davis v. Bandemer* 1986
  - Partisan gerrymandering is *justiciable*
  - What is the standard?
  - Court dismisses the claim but leaves the door open

# Davis v Bandemer (1986)

“The mere fact that there is no likely arithmetic presumption, such as the "one person, one vote" rule, in the present context does not compel a conclusion that the claims presented here are nonjusticiable.”



# Davis v Bandemer (1986)

“....The [idea] that *any* interference with an opportunity to elect a representative of one's choice would be sufficient to allege or prove an equal protection violation...would invite attack on all or almost all reapportionment statutes.”

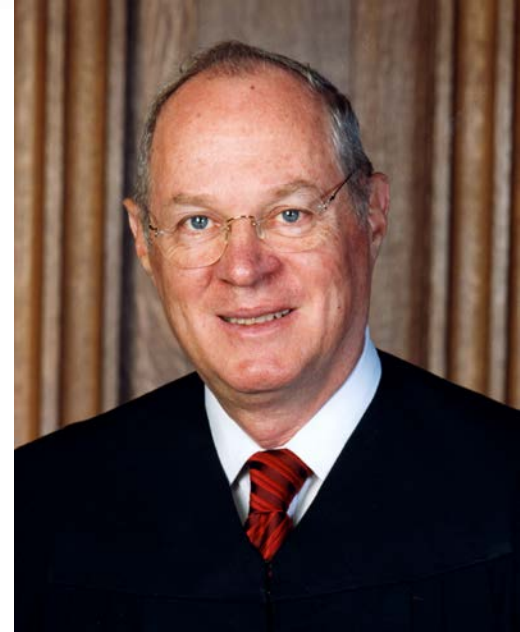


# Legal status quo ante

- *Davis v. Bandemer* 1986
  - Partisan gerrymandering is *justiciable*
  - What is the standard?
  - Court dismisses the claim but leaves the door open
- 18 years of failure...
- *Vieth v. Jubelirer* 2004
  - 4 justices want to give up
  - 4 justices have their own standards
  - Kennedy says he hasn't seen a standard, but there *might* be one

## Vieth v Jubelirer (2004)

“...The failings of the many proposed standards for measuring the burden a gerrymander imposes on representational rights make our intervention improper. If workable standards do emerge to measure these burdens, however, courts should be prepared to order relief.”



# Legal status quo ante, cont'd

- *LULAC v. Perry* 2006
  - 4 justices want to give up
  - 4 justices have their own standards
  - Kennedy says he hasn't see a standard but there *might* be one
- Key difference in LULAC: *Gelman-King bias* (“symmetry”)



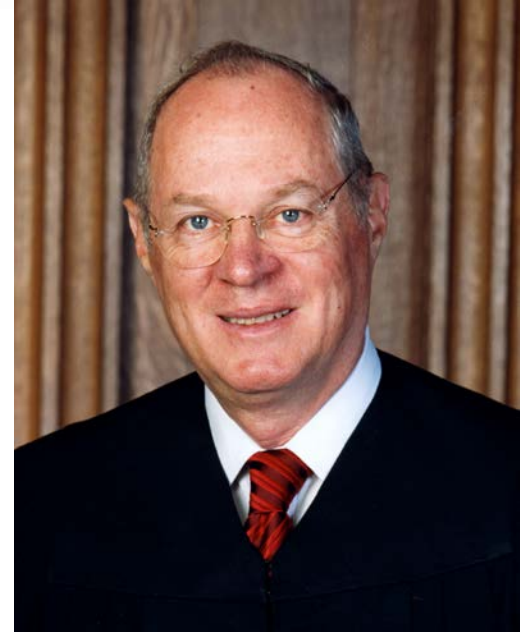
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# A call to action

“Technology is both a threat and a promise. On the one hand, if courts refuse to entertain any claims of partisan gerrymandering, the temptation to use partisan favoritism in districting in an unconstitutional manner will grow. On the other hand, these new technologies may produce new methods of analysis that make more evident the precise nature of the burdens gerrymanders impose on the representational rights of voters and parties....”

*(Vieth v Jubelirer 2004)*



# The measurement problem is difficult

- System was designed for *geographic* representation
  - A district-specific concept
- *Parties* now dominate American politics
  - An aggregate concept
- Other systems specify aggregate votes-seats relationships

# The measurement problem is difficult

- If votes-seats relationship is not specified in law, how can a party ever win too many seats?

BUT

- If voters care mostly about parties, how can partisan manipulation have no limits?

# The opening for social science

- Real but complex phenomenon
- Requires systematic, transparent measurement
  
- Perfect fit for social science, but a challenge for the courts

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# Gelman-King bias

- Principle: equal parties should be treated equally (“symmetrically”)
  - Same share of vote → same share of seats
- If unequal vote shares, pretend as if they *were* equal

60% Democratic vote = 70% Democratic seats →

50% Democratic vote = ??% Democratic seats

60% Democratic vote = 70% Democratic seats →

60% Republican vote = ??% Republican seats



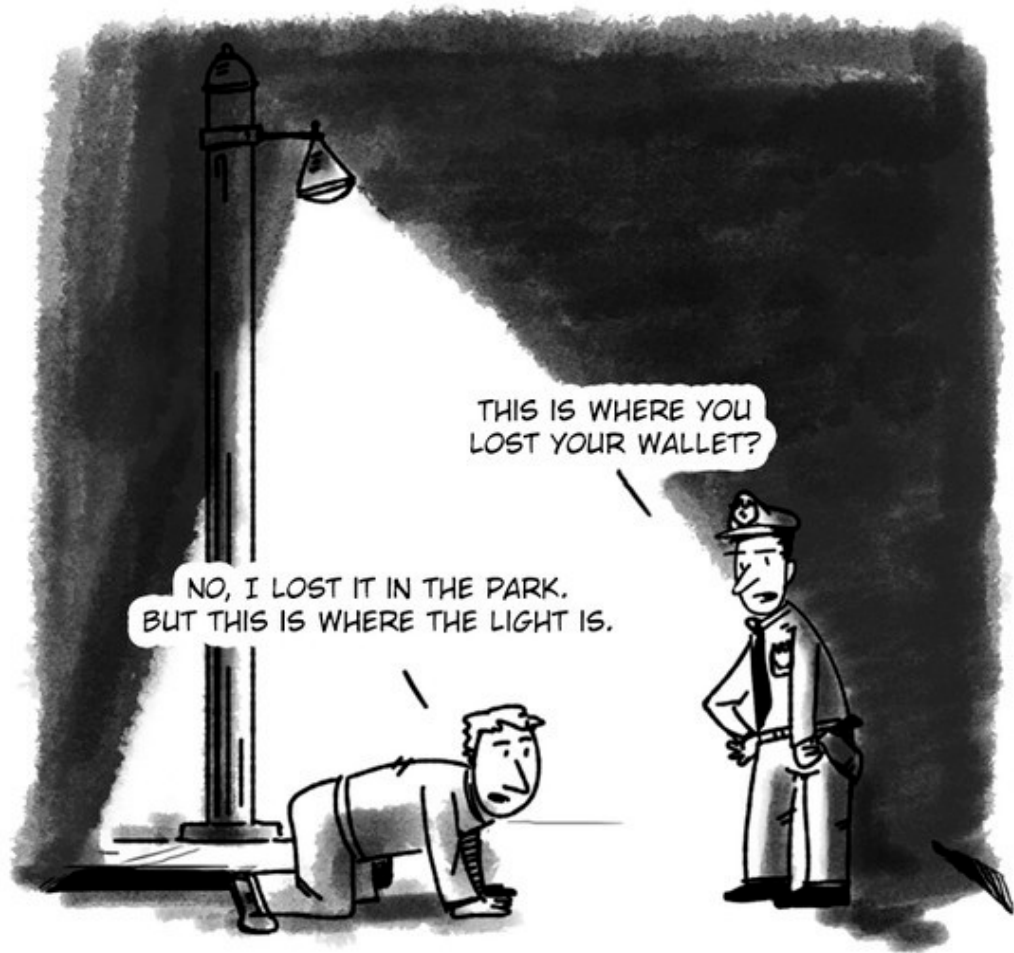
# G-K bias: advantages

- Grounded in firm normative idea: majority rule
  - Party with vote majority deserves seat majority
  - Great at capturing *majority entrenchment*
- Otherwise permits any relationship between votes and seats



# G-K bias: disadvantages

- Assumes a world that doesn't exist
- Uncompetitive states: can be very misleading
  - Seat gains from gerrymandering might not register
  - Could actually appear to benefit other side!
- Key question: is the counterfactual plausible?



THIS IS WHERE YOU  
LOST YOUR WALLET?

NO, I LOST IT IN THE PARK.  
BUT THIS IS WHERE THE LIGHT IS.



# G-K bias: disadvantages

- Assumes a world that doesn't exist
- Uncompetitive states: can be very misleading
  - Seat gains from gerrymandering might not register
  - Could actually appear to benefit other side!
- Key question: is the counterfactual plausible?
- Advocates have offered no thresholds
  - When is it a gerrymander? How much is too much?

Also  
Kennedy's  
concerns

## LULAC v Perry (2006)

A brief for one of the *amici* proposes a symmetry standard that would measure partisan bias by “compar[ing] how both parties would fare hypothetically if they each (in turn) had received a given percentage of the vote...we are wary of adopting a constitutional standard that invalidates a map based on unfair results that would occur in a hypothetical state of affairs...More fundamentally...how much partisan dominance is too much[?]”



# The mean-median difference

- Difference between the average district outcome (mean) and the outcome that divides the districts in half (median)

$$\text{MMD} = \text{med}(V) - \text{mean}(V)$$

- Intuition: in a symmetric distribution the two will be equal
- Advantages/disadvantages almost identical to G-K bias
  - Easier to calculate than G-K bias
  - But values less intuitive

# The efficiency gap

- Votes are “wasted” when they don’t contribute to a win
  - Any vote in excess of the number required to win
  - Any vote for a loser
- Efficiency gap fairness: no party should waste more votes than any other party
- Efficiency gap is difference between one party’s wasted votes and another’s, divided by the total votes cast

$$EG = (S - 0.5) - 2 * (V - 0.5)$$

# Efficiency gap: advantages

- No specific counterfactual required
- Competitive *and* uncompetitive: no problem
- Excellent at measuring *efficiency*
- 2-to-1 seats-to-votes ratio fits historical pattern
- Potential thresholds have been offered
  - Based on analysis of historical data: size and durability
- Fully extendable to all possible scenarios
  - Variations in turnout across districts
  - More than two parties

# Efficiency gap: disadvantages

- New idea: relatively untested
  - Is it really the best/only way to aggregate wasted votes?
- Requires strong commitment to equal wasted votes
- Often varies from one election to the next



# Simulations

- Computer draws many random redistricting plans
- Plans constrained to follow specified criteria (compactness, minority representation, etc.)
- Actual plan is compared to this distribution
- If an outlier, the political geography of a state can't explain the adoption of a plan

# Simulations: advantages

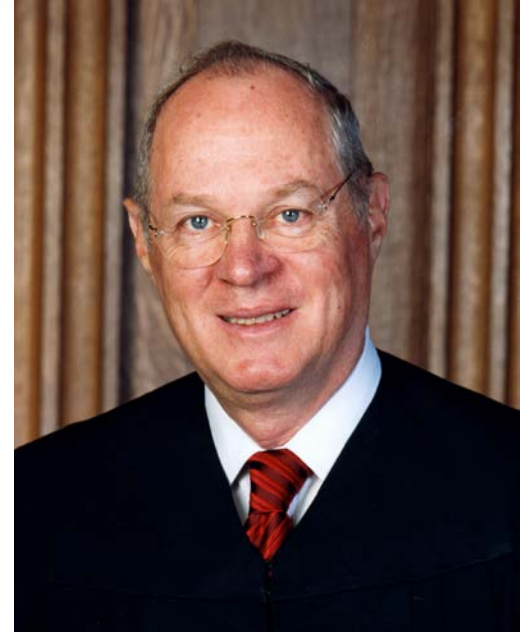
- Offers good general sense of state's political geography
- Can be an effective measure of intent

# Simulations: disadvantages

- Do simulations really sample the *entire* set of possible plans?
- Can a *distribution* really have normative force?
  - Does it matter if a plan is improbable if it's fair?

## Vieth v Jubelirer (2004)

“...even those criteria that might seem promising at the outset (e.g., contiguity and compactness)...cannot promise political neutrality...a decision under these standards would unavoidably have significant political effect, whether intended or not...if we were to demand that congressional districts take a particular shape, we could not assure the parties that this criterion, neutral enough on its face, would not in fact benefit one political party over another.”

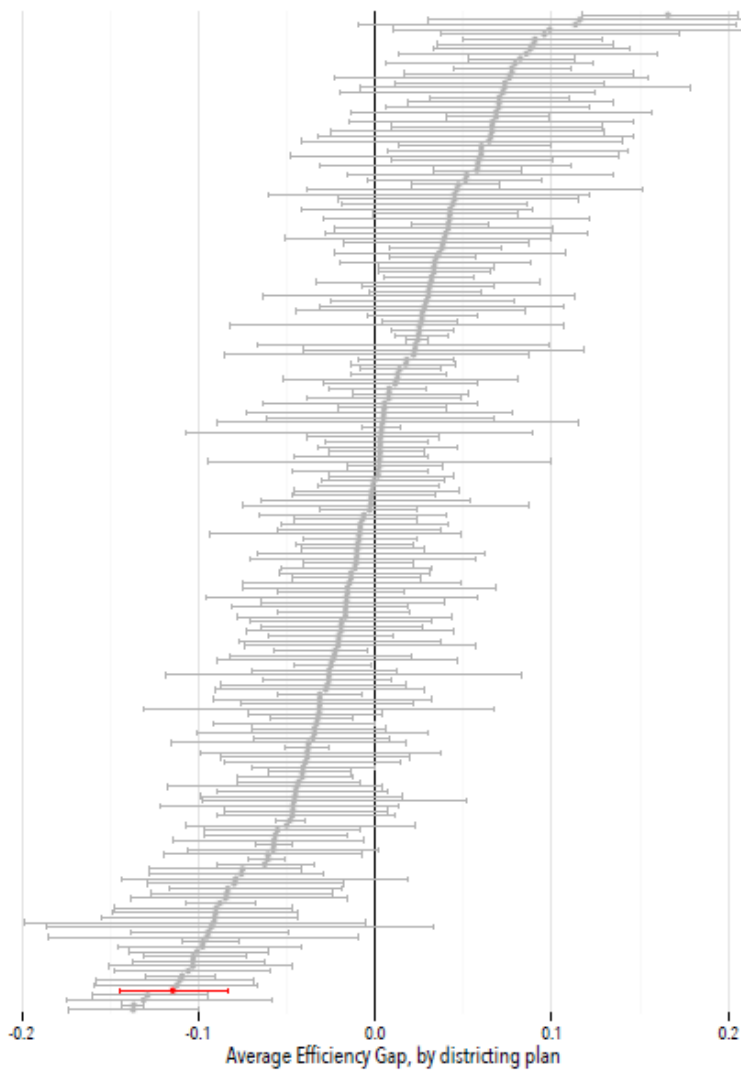


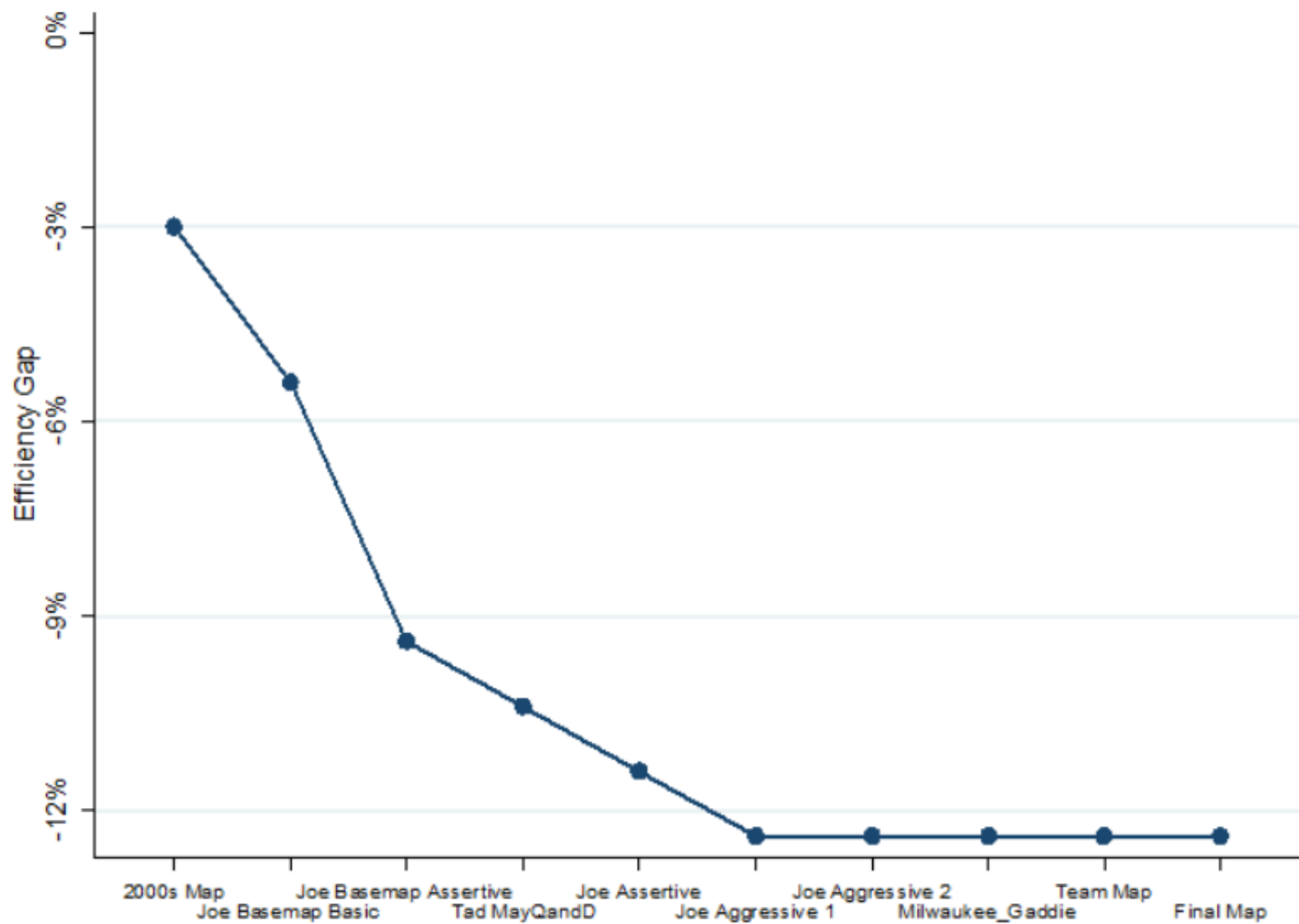
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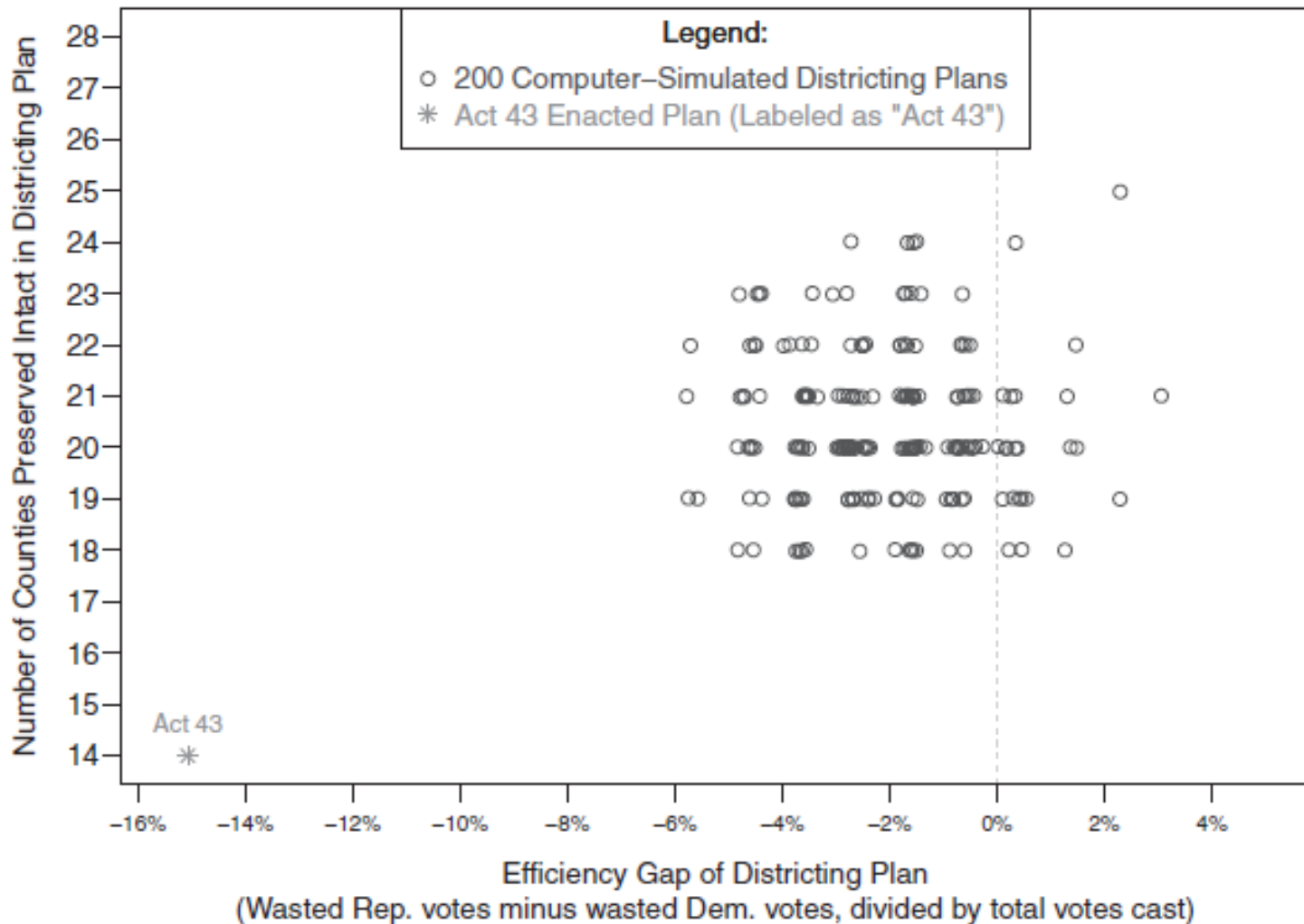
# The 2011 Wisconsin Assembly plan

- 2010: Republicans take control of Wisconsin legislature
- 2011: Republicans draw map with aggressive seat maximization strategy
- 2012: Republicans win 48.6% of the vote and 60 of 99 seats
- High values on all metrics in all years (2012, 2014, 2016)
  - G-K bias (13%, 12%, 13%)
  - Mean-median difference (6%, 7%, 7%)
  - Efficiency gap (13%, 10%, 11%)









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# A culture clash

“...if you’re the intelligent man on the street and the Court issues a decision, and let’s say...the Democrats win, and that person will say: ‘Well, why did the Democrats win?’ And the answer is going to be because the EG was greater than 7 percent, where EG is the sigma of party X wasted votes minus the sigma of party Y wasted votes over the sigma of party X votes plus party Y votes. And the intelligent man on the street is going to say that’s a bunch of baloney.”



# A culture clash

- If the court needs social science to solve a problem, does that mean the court can't solve it?
  - Simple, straightforward concepts do not need social science
  - Complex concepts will likely fail Roberts's "man on the street" test
- Can the court act on complex measures without compromising its legitimacy?

# Where next?

- Each measure has a Court weakness
  - G-K bias and MMD → counterfactuals
  - Efficiency gap → very new
  - Simulations → punish political geography
- Will there even be a “winning” metric?
- More likely: intervention will require measures to substantially agree
  - Would make litigation more likely in competitive states

# Where next?

- SCOTUS decision coming between January and June
- Reform efforts
  - Independent commissions
  - Legal constraints on legislatures
- Measures will continue to be valuable, regardless of the Court's decision

# Partisan Gerrymandering and the Supreme Court

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