

MATH FOR THE PEOPLE: REINING IN GERRYMANDERING WHILE PROTECTING MINORITY RIGHTS*

GOWRI RAMACHANDRAN**

Americans overwhelmingly want fair, democratic elections. They've rightly become energized behind getting rid of the practice of gerrymandering—widely understood to be a scourge on democratic principles. They want district maps that are fair in that they don't unduly favor one major political party over another or incumbents over newcomers. But what does it mean to be fair and democratic in a country with a history of rampant racial subordination in elections? What does a fair map look like in that context, and what is the process for drawing it?

When Congress amended the Voting Rights Act in 1982, it chose to answer that question by enacting, consistent with an “antisubordination” view of the Fourteenth and Fifteenth Amendments, a “results” test. That test imposes a duty on states to ensure that minorities have the same “opportunity . . . to elect representatives of their choice” as do other voters. Yet in the context of redistricting, that promise is currently fulfilled only erratically and incompletely, in part due to the federal courts’ imposition of a different duty on states, consistent with a “colorblind” or “anticlassification” view of those amendments. The courts have forbidden the use of race as a “primary” factor in redistricting decisions, even when done to benefit racial minorities. Thus, a mapmaker wishing to comply with the law—to fulfill both Congress’s and the courts’ views of the Reconstruction Amendments—must thread the tiniest of needles.

At the same time, those wishing to end the scourge of gerrymandering have failed, thus far, to square the obligation to protect minorities with the principles of neutrality and nonpartisanship that underlie their movement. Litigants and activists have generally accepted “Voting Rights Act compliance” as a legitimate

* © 2020 Gowri Ramachandran.

** Professor of Law, Southwestern Law School. This essay has benefited enormously from conversations and inspiration at two workshops generously organized and conducted by the Metric Geometry and Gerrymandering Group, and in particular from conversations with and feedback from Anshul Amar, Beth Caldwell, Mark Cammack, Moon Duchin, Eric McGhee, Dara Gold, Danielle Hart, Hila Keren, Justin Levitt, Mike Parsons, John Powers, Justin Solomon, Douglas Spencer, Nicholas Stephanopoulos, and Rachel VanLandingham. The *North Carolina Law Review*, in particular Ker Medero, provided superb editorial assistance. Institutional affiliation is listed for identification purposes only. All opinions and any errors are my own.

districting criterion and have even described it as one of the highest priority, but they have not grappled with how to reconcile the Act's antisubordination thrust with the courts' anticlassification values.

This Article brings good news, however. Inspired by recent attention to the problem of partisan gerrymandering, mathematicians have made advancements that could be used to reconcile these seemingly irreconcilable views of the Reconstruction Amendments—antisubordination versus colorblindness—at least in the context of redistricting. The political will is also forming. Now is the time for Congress to leverage both.

INTRODUCTION—THE REDISTRICTING REVOLUTION.....	275
I. THREADING THE NEEDLE: COMPLIANCE WITH SECTION 2 OF THE VOTING RIGHTS ACT	279
A. <i>The Multigenerational Effects of Exclusion</i>	280
B. <i>The Federal Courts' Anticlassification Doctrine</i>	282
C. <i>The Mistake: Requiring Availability of Majority-Minority Districts</i>	283
D. <i>The Exacerbating Element: How Racial Polarization May Be Proven</i>	284
E. <i>Courts vs. Commissions</i>	287
II. HOW TO SATISFY ANTICLASSIFICATION AND ANTISUBORDINATION.....	288
A. <i>MCMC-Inspired Methods</i>	289
B. <i>The Caselaw's Treatment of Analogous Methods</i>	296
III. MATH FOR THE PEOPLE: HOW TO RECONCILE ANTISUBORDINATION AND ANTICLASSIFICATION IN REDISTRICTING	301
A. <i>What Math for the People Can Do</i>	301
B. <i>Proposed Amendments to the "For the People Act"</i>	304
1. <i>Fairness Should Be Assessed According to the Best Available Mathematical and Scientific Methods</i>	304
2. <i>Gingles and Its Progeny, Designed for the Courts, Must Not Become Restraints on Redistricting Commissions</i>	306
3. <i>Federal Law Should Not Mandate that Jurisdictional or Other Splits Be Avoided</i>	307
4. <i>The Statute Should Clarify What "Equal Opportunity" Means: A Typical Level of Competitiveness</i>	308
5. <i>Congress's Enforcement Powers Under the Reconstruction Amendments: How Opportunity as</i>	

Competitiveness Reconciles the Court’s and Congress’s Views.....	311
CONCLUSION	313

INTRODUCTION—THE REDISTRICTING REVOLUTION

Gerrymandering—the practice of manipulating electoral district boundaries for some group, party, or (usually incumbent) person’s advantage—has been reviled at least since the term was coined in 1812.¹ It has received massive public attention recently, in part because of a 2016 decision of a three-judge district court in Wisconsin holding that partisan gerrymandering is not only justiciable, it is unconstitutional.² Prior to this decision, challenges to partisan gerrymandering had been deemed virtually nonjusticiable, given the Supreme Court’s decision in *Vieth v. Jubelirer*.³ After years of litigation, the Supreme Court finally concluded in *Rucho v. Common Cause*⁴ that partisan gerrymandering is indeed nonjusticiable in the federal courts.⁵ But in the intervening years, the public became excited that, perhaps, the “scourge” of gerrymandering⁶ could at last be reined in. The popular press published numerous articles on the subject,⁷ and even former President Barack Obama

1. Jennifer Davis, *Elbridge Gerry and the Monstrous Gerrymander*, LIBR. CONGRESS: IN CUSTODIA LEGIS (Feb. 10, 2017), <https://blogs.loc.gov/law/2017/02/elbridge-gerry-and-the-monstrous-gerrymander/> [<https://perma.cc/FB7U-TJSZ>].

2. *Whitford v. Gill*, 218 F. Supp. 3d 837, 843, 856 (W.D. Wis. 2016), *vacated*, 138 S. Ct 1916 (2018).

3. 541 U.S. 267 (2004). In this case, a plurality of the Court held that even though extreme partisan gerrymanders were likely unconstitutional, challenges to them were nonjusticiable. Justice Kennedy delivered the fifth vote for the result but explicitly indicated that litigants might in the future present the federal courts with a manageable standard for adjudicating when a redistricting plan has been unconstitutionally gerrymandered in a partisan manner. *Id.* at 301 (plurality opinion); *id.* at 306 (Kennedy, J., concurring).

4. 139 S. Ct. 2484 (2019).

5. *Id.* at 2506–07.

6. At the time of writing this Article, a Google search for “scourge and gerrymandering” (without the quotation marks) yielded over 40,000 results, including, for example, Eric Luper, *Redistricting: The Scourge that (Still) Haunts Michigan Government*, CITIZENS RES. COUNCIL MICH. (Jan. 24, 2019), <https://crcmich.org/redistricting-the-scourge-the-keeps-on-haunting-michigan-government/> [<https://perma.cc/S4BN-EXY2>], and *One for the People*, ECONOMIST (July 2, 2015), <https://www.economist.com/united-states/2015/07/02/one-for-the-people> [<https://perma.cc/5QNS-JHEC>].

7. See, e.g., Christopher Ingraham, *Still Unclear About Gerrymandering? See Exactly How It Worked in North Carolina*, WASH. POST (Jan. 10, 2018), <https://www.washingtonpost.com/news/wonk/wp/2018/01/10/how-north-carolina-republicans-almost-got-away-with-their-egregious-gerrymander/> [<https://perma.cc/7LKS-6KD9> (dark archive)] (describing a three-judge district court’s finding of partisan gerrymandering in North Carolina and mentioning that the Supreme Court was set to rule on *Gill v. Whitford*, 138 S. Ct. 1916 (2018), later that year); Clive Thompson, *Gerrymandering Has a Solution After All. It’s Called Math*, WIRED (Apr. 26, 2017), <https://www.wired.com/2017/04/how-math-can->

and former Attorney General Eric Holder spoke out against the practice.⁸ Mathematicians, in particular, became highly motivated to assist in developing good methods for identifying partisan gerrymanders, with lawyers interested in helping them understand the legal context in which those methods could be employed and, of course, interested in using those methods in litigation.⁹

However, while there has been great public and scholarly excitement about ridding the redistricting process of the scourge of *partisan* gerrymandering, less attention has been paid to a longstanding problem: the duty of states to protect minority voters' power under the Voting Rights Act ("VRA")¹⁰ while also avoiding violations of the Equal Protection Clause, which prohibits making race the primary factor in drawing a district or districts, even when done for the benefit of minorities.¹¹ The space that states have been left with to negotiate these legal mandates is both miniscule and confusing.¹² Even a nonpartisan mapmaker attempting to meet these goals could understandably find him- or herself unsure of how to comply. Moreover, the mapmaker can be subject to

save-democracy/ [https://perma.cc/MQQ8-3HSP (dark archive)] (explaining the efficiency gap measure of partisan gerrymandering).

8. A video featuring the two describing what gerrymandering is and explaining why it is unfair was released by the National Democratic Redistricting Committee ("NDRC") on July 11, 2018. Nat'l Democratic Redistricting Comm., *President Obama on Gerrymandering, Redistricting, & the 2018 Midterm Elections*, YOUTUBE (July 11, 2018), <https://www.youtube.com/watch?v=YyIWjO94Lnk> [https://perma.cc/HUS2-BHNV]. While the NDRC often markets itself as opposed to gerrymandering, much of the group's activities appear to be targeted at increasing Democratic power at the state level, not only to stop the gerrymandering attempts of Republicans but perhaps to engage in their own pro-Democrat gerrymandering. See Edward-Isaac Dove, *Dem Redistricting Group Picks Targets, Unleashes Obama*, POLITICO (July 11, 2018), <https://www.politico.com/story/2018/07/11/democrats-redistricting-obama-708500> [https://perma.cc/D85N-ZZXD].

9. Moon Duchin and Mira Bernstein at Tufts University successfully created the Metric Geometry and Gerrymandering Group ("MGGG"), <https://mggg.org/> [https://perma.cc/7FRD-TZA8], which not only has sponsored regional workshops and conferences on the topic for mathematicians, political scientists, and lawyers but also has employed researchers—mathematicians, computer scientists, and geographers—and has inspired published papers, whitepapers, and expert reports on the topic for use by governments and courts. *E.g.*, Gowri Ramachandran & Dara Gold, *Using Outlier Analysis To Detect Partisan Gerrymanders: A Survey of Current Approaches and Future Directions*, 17 ELECTION L.J. 286 (2018); MOON DUCHIN, OUTLIER ANALYSIS FOR PENNSYLVANIA CONGRESSIONAL REDISTRICTING (2018), <https://mggg.org/uploads/md-report.pdf> [https://perma.cc/D3H7-DLBM]; METRIC GEOMETRY & GERRYMANDERING GRP., COMPARISON OF DISTRICTING PLANS FOR THE VIRGINIA HOUSE OF DELEGATES (2018), <https://mggg.org/VA-report.pdf> [https://perma.cc/BEJ6-KEKG]. Mathematicians and political scientists outside of MGGG have also made advances. Wesley Pegden, Jowei Chen, and Jonathan Mattingly have served as expert witnesses in litigation, and courts have relied on their identifications of partisan gerrymanders to strike down those maps. See *Common Cause v. Rucho*, 279 F. Supp. 3d 587, 642–50 (M.D.N.C.), *vacated*, 138 S. Ct. 2679 (2018); *League of Women Voters v. Commonwealth*, 178 A.3d 737, 770–77 (Pa. 2018).

10. Voting Rights Act of 1965, Pub. L. No. 89-110, 79 Stat. 437 (codified as amended in scattered sections of 52 U.S.C.).

11. See *Bethune-Hill v. Va. State Bd. of Elections*, 137 S. Ct. 788, 798 (2017); *Miller v. Johnson*, 515 U.S. 900, 904 (1995); *Shaw v. Reno*, 509 U.S. 630, 657–58 (1993).

12. See *Abbott v. Perez*, 138 S. Ct. 2305, 2315 (2018) (describing the situation as a "legal obstacle course").

competing and confusing complaints from various stakeholders; even organizations purporting to represent the interests of the same (and multiple) racial minority group's voters are sometimes at odds during the map-drawing process.¹³ In its current form, House Bill 1, the "For the People Act" passed on March 8, 2019,¹⁴ seeks to respond to the great excitement around taking partisan politics out of redistricting, but it lacks any ideas for protecting and promoting minority voters' rights.

Fortunately, the recent advances of mathematicians and political scientists, who have been primarily working on the problem of proving, in the litigation context, that a map is the result of a partisan gerrymander, could be employed for what should be a nonpartisan purpose: to truly fulfill the duty to protect minority voters while still complying with the Constitution. As I detail in Parts II and III, the Redistricting Reform Act,¹⁵ with just a few improvements, could leverage these advances to create more breathing room and clarity for mapmakers, such as independent commissions, as they work to fulfill their duty to protect minority voting power while staying within constitutional guidelines. Moreover, this guidance would help ensure that commissions avoid being captured, knowingly or not, by partisan or other interests¹⁶ and successfully create the nonpartisan maps that the public is clamoring for.¹⁷

Not only are these mathematical and scientific advances ripe for use to solve the problem of treating minorities fairly in redistricting, the political moment is right as well. Public concern with the fairness of elections and public awareness of the importance of redistricting to achieve that fairness are extremely high.¹⁸ In passing the For the People Act, which includes the Redistricting Reform Act, Democrats in the House of Representatives are wisely responding to that public concern and awareness. As Representative

13. *Id.* at 2317, 2329, 2334 (describing the different stances of the Mexican American Legal Defense Fund, the Mexican American Legislative Caucus, and representatives of Como, an African American community, during the litigation and map-drawing process in Texas).

14. H.R. 1, 116th Cong. (2019).

15. The Redistricting Reform Act of 2019 is the section of the For the People Act describing how to operationalize independent redistricting commissions across the nation. *Id.* §§ 2400–2435.

16. ERIC MCGHEE, PUB. POLICY INST. OF CAL., ASSESSING CALIFORNIA'S REDISTRICTING COMMISSION 17–18 (2018), <https://www.ppic.org/wp-content/uploads/r-0317emr.pdf> [<https://perma.cc/D8N4-HYCV>]. The Public Policy Institute of California's study on California's independent redistricting commission shows a possible inadvertent Democratic lean and the possible intentional capture of the commission by partisan Democrats posing as nonpartisan to the commission. *Id.*

17. See *Americans Are United Against Partisan Gerrymandering*, BRENNAN CTR. FOR JUST. (Mar. 15, 2019), <https://www.brennancenter.org/analysis/americans-are-united-against-partisan-gerrymandering> [<https://perma.cc/M4UC-4T7L>].

18. Annie Lo, *Americans Are Transforming the Redistricting Process*, BRENNAN CTR. FOR JUST. (June 19, 2019), <https://www.brennancenter.org/analysis/citizen-and-legislative-efforts-reform-redistricting-in-2019> [<https://perma.cc/RN52-LJZZ>].

Sarbanes has shrewdly noted, a version of the Redistricting Reform Act could become law if a Democrat wins the Presidency in 2020, so House Bill 1 serves to show voters not only that his party is willing to respond to the public's concerns once given the power to do so but also how they plan to do so.¹⁹ They should not miss the opportunity, as they overhaul redistricting, to leverage advances in math and computing that could lead to truly *fair*, not just *neutral*, maps.

In Part I of this Article, I lay out the conundrum facing mapmakers trying to navigate the Voting Rights Act's duty to create equal opportunity for minority voters with the federal courts' prohibition on racial gerrymandering. I show how this conundrum came about, not merely as a result of an anticlassification approach to equal protection that is in tension with the Voting Rights Act's antisubordination thrust but also via judicial mistakes and misunderstandings as well as institutional reluctance to police redistricting. Fortunately, all three of these problems can be fixed via congressional action, as I explain in the next two parts.

In Part II, I explain specific mathematical and computing advances that have been made in recent years and how those advances can help reconcile two competing visions of how to enforce the Reconstruction Amendments in the voting context: the antisubordination vision, on the one hand, which seeks to actively ensure minority voters are protected during redistricting, and the anticlassification vision, on the other hand, which seeks to reduce attention to race in redistricting.²⁰

If we want electoral maps that are fair for everyone, it is not enough to demand neutrality and nonpartisanship. That leaves out the minority protection that is necessary given our nation's ugly history,²¹ in which entire communities were inarguably excluded from and intimidated out of voting for generations. Of course, how to appropriately deal with a history of racial discrimination is a thorny question that plagues our legal system in all kinds of arenas, not just voting. In the context of voting, however, there is no individualized, private cause of action available to even partially remedy the harm. We cannot, as a

19. Peter Overby, *Democrats Say Their First Bill Will Focus on Strengthening Democracy at Home*, NPR (Nov. 12, 2018), <https://www.npr.org/2018/11/12/665635832/democrats-say-their-first-bill-will-focus-on-strengthening-democracy-at-home> [<https://perma.cc/C28T-6Z2P>] (“Give us the gavel in the Senate in 2020 and we’ll pass it in the Senate,” Sarbanes said. “Give us a pen in the Oval Office and we’ll sign those kinds of reforms into law.”).

20. See Reva B. Siegel, *Equality Talk: Antisubordination and Anticlassification Values in Constitutional Struggles over Brown*, 117 HARV. L. REV. 1470, 1474–77 (2004) (describing these two now-competing visions but proposing that they “are friends as well as agonists”).

21. See, e.g., Mari J. Matsuda, *Looking to the Bottom: Critical Legal Studies and Reparations*, 22 HARV. C.R.-C.L. L. REV. 323, 363, 368 (1987) (providing arguments for reparations based on severe harms committed by the United States that have multigenerational effects, such as the takeover of Hawaiian lands and government as well as the internment of Japanese Americans).

remedy, double count the vote of an African American whose vote was suppressed decades ago. We cannot find a candidate who was deterred from even running for office by an unfavorable at-large electoral system and now say that he wins if he gets 45% of the votes instead of 51%. Yet the history is there, and its negative effects continue.

It is also not enough to simply assert, without further instruction, that commissions must do the nearly impossible: comply with the VRA and the Constitution. Therefore, in Part III, I put the solution in Part II into practice: I propose the specific amendments to House Bill 1 that are necessary to fulfill its promise of being truly “for the people.”

I. THREADING THE NEEDLE: COMPLIANCE WITH SECTION 2 OF THE VOTING RIGHTS ACT

Section 2 of the VRA requires that minority communities not have their voting power diluted, even unintentionally. They must enjoy the same opportunity as other groups to elect candidates they prefer.²² Yet, the Constitution’s Equal Protection Clause forbids racial gerrymandering, including when undertaken to benefit those same minorities protected by the VRA.²³ Thus, mapmakers must thread a very small needle when complying with both of these mandates.²⁴ Mathematicians and political scientists, too, have struggled to appropriately incorporate VRA compliance as a criterion in their methods for assessing partisanship of district maps.²⁵

Despite this difficulty, many state initiatives calling for independent redistricting commissions,²⁶ as well as House Bill 1 in its current form,²⁷ mandate that commissions comply with both the VRA and the Constitution. In fact, these two criteria are deemed to be of the highest priority, above all other criteria, in House Bill 1 as well as in some state initiatives.²⁸ Why do, and why should, activists and policymakers who are focused on ending the problem of gerrymandering care so much about VRA compliance that they make it such a

22. 52 U.S.C. § 10304(b), (d) (2012); *see also* *Bartlett v. Strickland*, 556 U.S. 1, 10 (2009); *Thornburg v. Gingles*, 478 U.S. 30, 50 & nn.16–17 (1986).

23. *See* *Miller v. Johnson*, 515 U.S. 900, 910–11 (1995); *Shaw v. Reno*, 509 U.S. 630, 657–58 (1993).

24. *See* *Abbott v. Perez*, 138 S. Ct. 2305, 2315 (2018) (using the phrase “legal obstacle course” to describe the situation faced by mapmakers).

25. *See* Ramachandran & Gold, *supra* note 9, at 299 (describing how mathematicians have used various unsatisfying methods such as “freezing” previously accepted opportunity districts as unchangeable in their outlier analysis or weighting maps in a manner that favors overpacking of minorities); DUCHIN, *supra* note 9, at 11 (identifying central “zones” around which district borders of a theoretical opportunity district can vary, but with no identified rigorous manner for identifying those zones).

26. *E.g.*, ARIZ. CONST. art. IV, pt. 2, § 1(14)(A); CAL. CONST. art. XXI, § 2(d)(1)–(2).

27. For the People Act of 2019, H.R. 1, 116th Cong. § 2413(a)(1)(A)–(B) (2019).

28. *See* ARIZ. CONST. art. IV, pt. 2, § 1(14); CAL. CONST. art. XXI, § 2(d); H.R. 1 § 2413(a)(1).

high priority? As I explain in the next section, the principles behind the VRA, in particular section 2, are necessary for true fairness in politics.

A. *The Multigenerational Effects of Exclusion*

Given our nation's history of voting rights violations, pure neutrality would in fact be undemocratic and unfair because the effects of exclusion from political power and political voice are multigenerational. When the value of a person's vote is diminished drastically by packing and cracking,²⁹ increasing heavily the likelihood that the person's vote will be wasted, then the effect of that devaluation goes far beyond the wasted vote itself.³⁰ The devaluation leads to lower voter turnout, as it is pointless to vote when the odds one's vote matters are negligible.³¹ It likely also leads to lower participation in many other parts of the electoral process. If one's vote, along with the votes of others in one's social group, are going to be wasted anyway, then why run for office, consider running for office, call a candidate or elected official with one's opinions, learn about a candidate's policy goals and values, attend party organizing meetings, or attempt to form coalitions with other groups on a package of policy goals?³²

Even if people of color were only effectively deterred from political participation in this way in the *past*, then we should still expect to see effects of that on their descendants *today*. We would expect fewer young and middle-aged people of color to have parents and grandparents with political connections and experience than young and middle-aged whites.³³ We would expect fewer young and middle-aged people of color to have grown up in a community that felt like democracy worked for them and included them. It makes sense that when entire communities are excluded from political participation they will have less incentive than other communities to form social and cultural and ultimately political coalitions in order to get attention paid to their preferred policy goals.

29. Packing is the practice of concentrating voters who tend to support certain candidates or parties into a small number of districts so that their influence is limited to those few districts, while cracking is the practice of splitting such voters into a large number of districts, so that they make up too small a proportion of voters in each district to be able to elect their candidates of choice. See Gill v. Whitford, 138 S. Ct. 1916, 1924 (2018) (describing these practices).

30. Wasted votes are votes that a candidate did not need in order to win as well as votes for losing candidates. See Lani Guinier, *Groups, Representation, and Race-Conscious Districting: A Case of the Emperor's Clothes*, 71 TEX. L. REV. 1589, 1592, 1606 (1993); Nicholas O. Stephanopoulos & Eric M. McGhee, *Partisan Gerrymandering and the Efficiency Gap*, 82 U. CHI. L. REV. 831, 834 (2015).

31. See Joel Jordan, *The Effect of Electoral Competitiveness on Voter Turnout* 33, 36 (2017) (unpublished thesis, Western Washington University), https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1042&context=wwu_honors [<https://perma.cc/LFJ2-X7QR>].

32. See Richard H. Pildes, *Is Voting-Rights Law Now at War with Itself? Social Science and Voting Rights in the 2000s*, 80 N.C. L. REV. 1517, 1536–37 (2002).

33. See Steve Phillips, *It's Time To Diversify the Democratic Party Leadership*, NATION (Nov. 18, 2016), <https://www.thenation.com/article/its-time-to-diversify-the-democratic-party-leadership/> [<https://perma.cc/P4Z3-WRB7>] (noting that leaders of major progressive fundraising organizations, those who “control the party purse strings,” were not racially representative of the party's voters).

In other words, even after many of the devices, such as literacy tests, that insidiously suppressed the votes of people of color were prohibited by the Voting Rights Act, lasting harm had been done.³⁴ The same is true for gerrymandering and electoral system choices (such as at-large elections) that sought to dilute the voting power of minorities by forcing them to more often cast wasted votes.³⁵ Indeed, if we accept racial polarization in voting as evidence of these sorts of lasting effects, then there is good empirical evidence that the problem lingers long after “politics has evolved beyond the days of threatened lynchings for the exercise of the franchise.”³⁶ An analysis of voting patterns in both the 2008 and 2012 elections showed that racial polarization was *increasing*³⁷ in jurisdictions that had previously employed a “test” or “device” restricting registration or voting.³⁸

There is no way, absent group-based³⁹ structural reform, to do anything about these lasting, and even increasing, effects: We can’t engage in a holistic individualized review of every voter, decide that some of them contribute to the diversity of our nation’s political life more than others, and count those people’s votes for more.⁴⁰ Even if we could, this would do nothing to transform the types of political coalitions that voters and activists view as plausible ones. There are no easy individual claims to reparations or narrowly tailored remedies that would correct the lingering effects of past policies on our electoral systems and practices. Our history requires *structural* attention to the opportunities of minorities as voters, candidates, and community leaders to participate and be represented in electoral politics.

That is why Congress amended section 2 of the Voting Rights Act in 1982 to add a *results* test aimed at reducing the racially subordinating effects of

34. Pildes suggests that, for instance, a relatively safe district might be necessary to encourage a member of a racial minority that had been previously shut out of the process to run. See Pildes, *supra* note 32, at 1522, 1536–37.

35. See generally Tim A. Thomas, Annotation, “At-large” Elections as Violation of § 2 of Voting Rights Act of 1965 (42 U.S.C.A. § 1973), 92 A.L.R. Fed. 824 (1989 & Supp. 2019) (describing the use of at-large elections to dilute minority voting power, the difficulty of proving intent behind this practice, and the possibility of using section 2 of the VRA to challenge this practice based on its effects).

36. Stephen Ansolabehere, Nathaniel Persily & Charles Stewart III, *Regional Differences in Racial Polarization in the 2012 Presidential Election: Implications for the Constitutionality of Section 5 of the Voting Rights Act*, 126 HARV. L. REV. F. 205, 206–07 (2013).

37. *Id.* at 205–06.

38. See Voting Rights Act of 1965, Pub. L. No. 89-110, §§ 4–5, 79 Stat. 437, 438–39 (codified as amended at 52 U.S.C. §§ 10303–10304 (2012)).

39. See Guinier, *supra* note 30, at 1599–602 (arguing that the idea of voting rights as individual rather than collective is at odds with the law).

40. *But cf.* Fisher v. Univ. of Tex. at Austin, 136 S. Ct. 2198, 2207–15 (2016) (upholding this approach in undergraduate level admissions); Grutter v. Bollinger, 539 U.S. 306, 322–44 (2003) (calling for this approach in graduate level school admissions).

discrimination, even that discrimination which is in the past.⁴¹ In addition to forbidding intentional exclusion from voting on the basis of race, the VRA is now violated whenever a minority community is less able than other communities to elect its candidates of choice.⁴² These violations would normally require structural ameliorative action, such as drawing “opportunity districts” in which minority communities have enough voting strength that they could elect candidates they prefer.⁴³ Unfortunately, as I demonstrate in the next sections, the VRA as enforced by the federal courts has severely limited the impact and applicability of the section 2 results test.

B. *The Federal Courts’ Anticlassification Doctrine*

The federal courts have, since the Rehnquist era, promoted an anticlassification view of the Equal Protection Clause. Under this view, the core problem that the Equal Protection Clause counters is the problem of governments taking account of race, that is, classifying people on the basis of their race. Chief Justice Roberts famously provided an (empirically unfounded)⁴⁴ reason for this view in *Parents Involved in Community Schools v. Seattle School District No. 1*⁴⁵: “The way to stop discrimination on the basis of race is to stop discriminating on the basis of race.”⁴⁶ This stands in stark contrast to the antistatutory view of the Equal Protection Clause that the VRA, particularly section 2, represents. Under the antistatutory view, the core harm that the Equal Protection Clause counters is the harm of racial subordination.

Thus, employing the anticlassification view, courts have forbidden mapmakers from taking account of race as the primary factor in choosing how to draw a district, even if the mapmaker is seeking to benefit racial minorities.⁴⁷ The only potentially available defense to a showing that race was indeed a primary factor is that this was necessary to comply with the VRA. Yet the Supreme Court has not even clarified that this would certainly be an acceptable defense⁴⁸ and has instead indicated that mapmakers must seek to comply with

41. Voting Rights Act Amendments of 1982, Pub. L. No. 97-205, § 3, 96 Stat. 131, 134 (codified as amended at 52 U.S.C. § 10301 (2012)).

42. See 52 U.S.C. § 10304(b), (d) (2012).

43. See *Abbott v. Perez*, 138 S. Ct. 2305, 2315 (2018).

44. See Victoria C. Plaut, *Diversity Science: Why and How Difference Makes a Difference*, 21 PSYCHOL. INQUIRY 77, 86–87 (2010).

45. 551 U.S. 701 (2007).

46. *Id.* at 748.

47. See *Bethune-Hill v. Va. State Bd. of Elections*, 137 S. Ct. 788, 797–98 (2017); *Shaw v. Reno*, 509 U.S. 630, 657–58 (1993).

48. See *Abbott*, 138 S. Ct. at 2315 (assuming, and not holding, that compliance with the VRA is a compelling interest justifying use of race as a primary factor in drawing a district, but noting that narrow tailoring would require proof of a state’s belief that the district *had* to be drawn in order to comply with the Act).

the VRA, which of course would require being race-conscious, while also avoiding letting race become the primary factor in a districting decision.⁴⁹

This means that even if a benevolent mapmaker identifies a situation in which minority voters have likely been denied the same opportunity as other voters to elect candidates of their choice, it will be incredibly difficult for the map to be redrawn to provide that opportunity. How is one to ensure that minority voters get equal opportunity without paying a great deal of attention to race? And what does equal opportunity even mean in the context of an anticlassification norm? Further, as the next two sections detail, the federal courts have interpreted the requirements of the VRA in an extremely narrow and likely mistaken manner. Without amendments clarifying what equal opportunity means and correcting these judicial errors, House Bill 1 and similar state laws governing redistricting commissions will likely exacerbate these problems by reiterating that VRA compliance is of extremely high priority, second only to constitutional compliance.⁵⁰

C. *The Mistake: Requiring Availability of Majority-Minority Districts*

The federal courts have severely limited the instances in which creation of an opportunity district is required. At the same time, they may have induced overpacking that *harms* minorities for several reasons. In *Thornburg v. Gingles*,⁵¹ the seminal case interpreting section 2 of the Voting Rights Act, the Supreme Court outlined three elements that must be met in order for a community to have a section 2 right to an opportunity district.⁵² The first element requires that one show it is possible to draw a “majority-minority” district, on the theory that only in this case would it be *possible* for the minority to elect a candidate of preference in an ideally drawn map or voting system.⁵³ Thus, only in this case would any opportunity have been denied by the use of a different map or voting system (such as the at-large system challenged in *Gingles*).⁵⁴

But this claim about possibility is erroneous, and the element is therefore unduly restrictive. First, it relies on a somewhat-outdated assumption of severely racially polarized voting, in which whites do not vote for minority-preferred candidates in any significant numbers.⁵⁵ Second, it relies on a simplified and outdated blacks-versus-whites view of racially polarized voting patterns. Particularly in multiracial, multireligious, and multilingual environments, minority voters may often be able to, in coalition with other

49. *See id.* (describing the problem as a “legal obstacle course”).

50. *See* For the People Act of 2019, H.R. 1, 116th Cong. § 2413(a)(1)(A)–(B) (2019).

51. 478 U.S. 30 (1986).

52. *Id.* at 50–51.

53. *Id.* at 50 & n.17; *see also* Bartlett v. Strickland, 556 U.S. 1, 11 (2009) (reiterating this standard).

54. *Gingles*, 487 U.S. at 50 n.17.

55. *See* Pildes, *supra* note 32, at 1527–30.

communities, elect a candidate of their choice in districts where their share of the voting age population is well below fifty percent.⁵⁶ Much lower percentages of minority voting age population may be all that is needed for an opportunity district to “perform,” either as a so-called “crossover district”⁵⁷ or as a so-called “coalition district.”⁵⁸ Yet, in *Bartlett v. Strickland*,⁵⁹ a plurality of the Supreme Court did not permit “crossover districts” as a means of satisfying the Voting Rights Act and affording minority opportunity.⁶⁰ The Court has not spoken to whether “coalition districts” could be permissible under section 2, and some lower courts have held that they are,⁶¹ but there is a great deal of legal uncertainty on the issue.

Of course, the election of *any* candidate involves coalitions. Minority communities themselves are not monolithic—African American communities are coalitions of men and women; naturalized and birthright citizens; Christians, Muslims, and atheists; straight and queer persons; and more.⁶² It is somewhat arbitrary to decide that African American men and women who often share candidate preference constitute one “community” but that African American and Latino voters who may share candidate preference instead constitute a “coalition” of two communities. Nevertheless, these are the terms used by the federal courts for situations of somewhat less extreme levels of racial polarization than that seen in earlier eras.

D. *The Exacerbating Element: How Racial Polarization May Be Proven*

The next two elements of the *Gingles* standard require that one show racially polarized voting in the community and that the community lacks

56. See *Perez v. Abbott*, 253 F. Supp. 3d 864, 921 (W.D. Tex. 2017) (“As discussed in the Conclusions of Law, however, this Court finds that coalition districts may be required by § 2, so long as Plaintiffs satisfy *Gingles* with regard to the coalition.”); see also Christopher S. Elmendorf & Douglas M. Spencer, *Administering Section 2 of the Voting Rights Act After Shelby County*, 115 COLUM. L. REV. 2143, 2207 (2015).

57. This is the term some courts use for a district in which minorities have an opportunity to elect candidates of their preference because, despite racially polarized voting, some reasonable proportion of whites is willing to vote for the minority-preferred candidate. See, e.g., *Strickland*, 556 U.S. at 13.

58. This is the term used to describe a district in which a minority community has an opportunity to elect its candidates of choice because, despite racially polarized voting, some proportion of voters who are members of *another* racial, language, or ethnic minority are willing to vote for the first minority community’s preferred candidate. For instance, African American voters may prefer candidate *A*, and enough Asian American voters may also prefer candidate *A*, so that candidate *A* has a reasonable chance of winning. See, e.g., *id.*; *Perez*, 253 F. Supp. 3d at 921.

59. 556 U.S. 1 (2009).

60. *Id.* at 14.

61. See, e.g., *Perez*, 253 F. Supp. 3d at 921.

62. See generally Kimberle Crenshaw, *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics*, 1989 U. CHI. LEGAL F. 139 (coining the term intersectionality and making the point that black men and women experience different forms of discrimination, as do white women and black women).

numerical strength under the challenged voting system, on the grounds that the combination of racial polarization and numerical minority is what produces the comparatively reduced ability to elect a preferred candidate.⁶³ When voting is racially polarized, the majority community gets to elect its preferred candidate for many seats, despite the lack of support from minority voters, because it is the numerical majority. But the minority community cannot elect its preferred candidates because it is a numerical minority, and there aren't enough white voters willing to support the minority-preferred candidate in order to win an election. However, the methods that federal courts accept for showing racially polarized voting are difficult to meet when minorities are not geographically segregated.⁶⁴

One of the standard methods used by expert witnesses in federal courts to show racial polarization is called “ecological inference.”⁶⁵ Voting in the United States is generally anonymous, so there is no official record of whom white, black, Asian American, or Latino voters actually voted for. Thus, experts instead look at the vote totals for various candidates within each precinct, along with the racial makeup of voters in each precinct. For instance, in precinct *A*, Latino voters might make up 95% of the registered voters, and candidate *X* might have received 85% of the votes in that precinct. In precinct *B*, Latino voters might make up only 5% of the registered voters, and candidate *X* might have received only 20% of the votes in that precinct. In precinct *C*, Latino voters might make up about 50% of the registered voters, and candidate *X* might have received about 50% of the votes in that precinct. The expert will run a regression to see how well correlated the varying racial makeup of the precincts is with the varying levels of support for candidate *X*. If the correlation is strong, then this is used to infer racially polarized voting—the inference is that the reason candidate *X* got more votes in the heavily Latino district is that Latino voters prefer candidate *X* and non-Latino voters do not.⁶⁶ However, if Latino voters in the jurisdiction are not so heavily geographically segregated, then the Latino voting age population will not vary so much across the precincts—it might vary, for instance, only between 40% and 60%, as opposed to between 5% and 95%. Without any examples of heavily segregated precincts, it will be harder to substantiate a correlation between racial makeup of the precinct and candidate

63. See *Thornburg v. Gingles*, 478 U.S. 30, 51 (1986).

64. See *Elmendorf & Spencer*, *supra* note 56, at 2159–68.

65. See *id.* at 2177.

66. See *id.*

preference.⁶⁷ Courts have accepted other forms of evidence of racially polarized voting, such as exit polling data, but this data is not always available.⁶⁸

Additionally, multiracial dynamics can mask racial polarization.⁶⁹ Suppose Latinos exhibit high levels of racial polarization with respect to whites in a particular area. They tend to prefer candidate *X*, but whites tend not to prefer candidate *X*. Suppose that Asian Americans also live in this area in significant numbers, but those Asian Americans who live in white neighborhoods vote similarly to whites, while those who live in nonwhite neighborhoods—whether they be predominantly Latino, Asian American, or a mix of the two—vote similarly to Latinos. There may be precincts that have very low levels of Latino voting age population, but that show strong preference for candidate *X* because the precincts are predominantly Asian American. And there may be precincts that have fairly significant levels of Asian American voters—say 30%—but that nevertheless do not exhibit any discernible levels of support for candidate *X* because these are majority white precincts, and therefore the Asian American voters are not predominantly the ones who favor candidate *X*. In such a situation, a strong correlation between levels of Asian American population in a precinct and levels of support for candidate *X* will not appear. That is because the level of support that we can expect from an Asian American voter is not independent of the demographics of the neighborhood. In reality, though, this is a situation in which Latino and white voters do in fact vote in a racially polarized manner. It may also be an area with high potential to draw a “coalition” district, just not of the sort currently imagined by federal courts. Rather than aiming to draw a district with a particular level of nonwhite voters, one could aim to draw a district with a particular number of nonwhite precincts.

Thus, under the federal courts’ interpretation, the Voting Rights Act applies only to communities that are quite segregated *and* can prove that they possess a section 2 right to an opportunity district, thereby providing a basis of permission for a map-drawer to protect them. Given that no rule clearly prohibits accidental or thoughtless overpacking of those minorities, one can see how it would be easy to create a heavily majority-minority district to “protect” the population rather than two districts with a strong enough minority percentage to form coalitions with other groups—whether that be another racial minority, a language minority, youth, or sexual minorities.⁷⁰ This can happen by accident, or incumbent minority choice candidates may even have an

67. Of course, if Latino voters are so heavily segregated that there are very few precincts with low percentages of Latino voters, it will similarly be hard to show racially polarized voting. But in this instance, the jurisdiction is somewhat naturally “packed” with respect to minority voters, and they will likely end up with something like an opportunity district even in the absence of litigation to create an enforceable “right” to one.

68. See Elmendorf & Spencer, *supra* note 56, at 2159.

69. See *id.*

70. See Pildes, *supra* note 32, at 1551.

incentive to encourage and conspire with legislators representing the majority in order to overpack minorities and protect their own seats.⁷¹

E. *Courts vs. Commissions*

An additional reason the federal courts have chosen a narrow definition of section 2 rights is that they are concerned with the capacity of courts to oversee redistricting, given the numerous competing and overlapping criteria that must and should be considered. This concern was so strong in the context of partisan gerrymandering that it led to the Supreme Court holding such claims nonjusticiable.⁷² And in *Strickland*, the plurality opinion stated clearly that the fact that section 2 is enforced through the courts was part of the reason it found the creation of so-called crossover districts impermissible under the Act:

Determining whether a § 2 claim would lie—*i.e.*, determining whether potential districts could function as crossover districts—would place courts in the untenable position of predicting many political variables and tying them to race-based assumptions. The Judiciary would be directed to make predictions or adopt premises that even experienced polling analysts and political experts could not assess with certainty, particularly over the long term.⁷³

But this concern is not present at all when a redistricting commission, as opposed to a federal court, acts to create opportunity districts. Thus, there is a strong argument that, even without clarification from Congress that the standards of *Gingles* and *Strickland* are too strict, a redistricting commission could consider the creation of more rather than fewer opportunity districts as a positive criterion without first meeting the demand of *Gingles* that it be possible to create a majority-minority district.

Finally, litigation over whether race has been used appropriately in redistricting can be reduced by the use of ensemble analysis⁷⁴ to check for partisan results in the maps being considered by commissions. Commissions can ensure that whatever maps they ultimately choose are, in fact, substantively fair when it comes to partisan results. They can choose maps that score well on measures of minority protection, for instance on number of opportunity

71. Paul Taylor, *GOP Will Aid Civil Rights Groups in Redistricting*, WASH. POST (Apr. 1, 1990), <https://www.washingtonpost.com/archive/politics/1990/04/01/gop-will-aid-civil-rights-groups-in-redistricting/0ebde0d3-4088-4e5c-803f-d83436010836/> [<https://perma.cc/9Q8H-BZLC> (dark archive)] (describing an alliance to create more majority-minority districts in order to benefit the Republican party by packing minority voters into fewer districts, and quoting Senator Trent Lott: “A lot of us think it is blatantly unfair when you say a district has to be carved out’ to create a minority seat . . . [b]ut having said that, there is no question that over the long run, it will redound to the benefit of Republicans.”).

72. *Rucho v. Common Cause*, 139 S. Ct. 2484, 2508 (2019).

73. *Bartlett v. Strickland*, 556 U.S. 1, 17 (2009).

74. See *infra* Section II.A (explaining this type of ensemble analysis in detail).

districts, but that *also* score well on measures such as efficiency gap and proportional representation of the major parties. By choosing maps that create minority opportunity, but that are not unnecessarily Democrat or Republican favoring, commissions can reduce the incentive for partisan groups to challenge the maps in the first place.

In Part III, I will outline the specific changes that Congress can make to House Bill 1, in order to create, within the confines of the anticlassification doctrine, a bit more breathing room for commissions and, in particular, to avoid the implication that by referencing the Voting Rights Act Congress intends to validate the errors of *Gingles* and *Strickland*. With these amendments, House Bill 1 could create a bit more space for redistricting commissions to protect and promote minority voters' power in a structural way—by creating opportunity districts—while remaining compliant with the federal courts' view of what the Constitution requires.

II. HOW TO SATISFY ANTICLASSIFICATION AND ANTISUBORDINATION

On to the good news: With or without the additional breathing room that I recommend Congress create in Part III, the best available mathematical methods, in particular Markov Chain Monte Carlo (“MCMC”)-style methods that I describe in the next section, can help redistricting commissions and other mapmakers avoid maps that dilute the voting power of minority voters. Importantly, these methods can help them do so without subordinating other redistricting principles to the desire to help or to avoid harm to minority voters. These new mathematical methods are able to create ensembles of maps that incorporate multiple districting criteria at once without treating any one criterion as dispositive. They further enable mapmakers to *choose* from those ensembles those that are within acceptable ranges along criteria that are particularly important under state and/or federal law, such as partisan fairness⁷⁵ or compactness.⁷⁶ These ensemble methods are thereby perfectly suited to avoid the use of race as a *primary* factor in drawing one or more districts.⁷⁷ This will

75. Some state redistricting commission laws specify some form of partisan fairness as a requirement, *e.g.*, CAL. CONST. art. XXI, § 2(e) (“Districts shall not be drawn for the purpose of favoring or discriminating against an incumbent, political candidate, or political party.”), as does the For the People Act of 2019, H.R. 1, 116th Cong. § 2413(a)(2) (2019) (“[T]he redistricting plan developed by the independent redistricting commission shall not, when considered on a Statewide basis, unduly favor or disfavor any political party.”).

76. Many states prefer more “compact” districts to less compact districts. *See, e.g.*, CAL. CONST. art. XXI, § 2(d)(5) (requiring the Citizens Redistricting Commission to treat geographical compactness as a positive factor in redistricting, “to the extent practicable,” and stating that “nearby areas of population [should not be] bypassed for more distant population”).

77. *Cf. Easley v. Cromartie*, 532 U.S. 234, 257 (2001) (“[T]he party attacking the legislature’s decision bears the burden of proving that racial considerations are ‘dominant and controlling’” (quoting *Miller v. Johnson*, 515 U.S. 900, 913 (1995))).

help commissions, even in the absence of congressional action, to remain compliant with the Equal Protection Clause while still avoiding the dilution of minority votes.

A. *MCMC-Inspired Methods*

Most of the mathematical methods I have referenced were developed in the context of attempts to find mathematical solutions to defining an unconstitutional partisan gerrymander. As I have explained in recent work,⁷⁸ providing a simple standard for demonstrating a partisan gerrymander proved difficult for a variety of reasons. First, the definition of partisan gerrymandering is itself unclear.⁷⁹ Some definitions emphasize partisan intent.⁸⁰ Others emphasize partisan results, such as a lack of proportionality between the share of votes a major party receives and the share of seats it receives.⁸¹ Others emphasize lack of competitiveness due to too many “safe” districts, in which the percentage of Democrat or Republican voters is very high, such that it is unlikely a candidate from a different political party could ever carry the district.⁸² Some fail to distinguish between these concerns, even though a map can perform very poorly with respect to one concern—e.g., competitiveness—while performing very well with respect to another—e.g., partisan results. For instance, a map may have zero competitive districts but may contain safe Democrat districts and safe Republican districts in exact proportion to the shares of voters that tend to prefer those political parties.⁸³ This problem of defining partisan gerrymandering is not insurmountable, however, as those attempting to find partisan gerrymanders could simply ensure that all these elements—competitiveness, intent, and results—are considered. Indeed, that is what district courts in Wisconsin and North Carolina did in

78. Ramachandran & Gold, *supra* note 9, at 287.

79. *Id.*

80. *See, e.g.,* Davis v. Bandemer, 478 U.S. 109, 116 (1986) (describing partisan gerrymandering as an “intentional effort to favor” one political party over another); Justin Levitt, *Intent Is Enough: Invidious Partisanship in Redistricting*, 59 WM. & MARY L. REV. 1993, 2009–18 (2018) (arguing for an intent standard).

81. *See, e.g.,* Davis, 478 U.S. at 113 (describing partisan gerrymandering as when a map “unconstitutionally dilute[s]” votes); Emily Bazelon, *The New Front in the Gerrymandering Wars: Democracy vs. Math*, N.Y. TIMES MAG. (Aug. 29, 2017), <https://www.nytimes.com/2017/08/29/magazine/the-new-front-in-the-gerrymandering-wars-democracy-vs-math.html> [<https://perma.cc/8T6T-CLR2> (dark archive)] (emphasizing the result of nonproportional representation); Ingraham, *supra* note 7 (same).

82. *See, e.g.,* MCGHEE, *supra* note 16, at 14–17 (using competitiveness of districts as one measure of success of California’s independent redistricting commission in achieving its goals).

83. *See, e.g.,* Mira Bernstein & Moon Duchin, *A Formula Goes to Court: Partisan Gerrymandering and the Efficiency Gap*, 64 NOTICES AM. MATHEMATICAL SOC’Y 1020, 1021 (2017) (illustrating that a map with no competitive districts and many safe districts receives a perfect efficiency gap score and providing an example of this sort of map).

rejecting maps for being too partisan⁸⁴ prior to the Supreme Court's 2019 decision finding the entire question nonjusticiable.⁸⁵

The second reason that it has been difficult to provide a simple standard for identifying partisan gerrymanders is that the particular geography and demography of a state can create a natural tilt towards one major party or the other.⁸⁶ This is especially the case given that mapmakers may legitimately need to consider other criteria beyond partisan fairness, such as population equality, contiguity, compactness, and avoiding the splitting of jurisdictions such as counties or municipalities. For instance, in the two maps in figure 1,⁸⁷ suppose the dotted lines represent some boundary, such as a county line, that may not be split under a state's laws. Suppose also that the state must comply with the constitutional rules that districts have equal populations. State *A* is naturally Republican favoring, due to the packing of many Democrat voters into one county. The map drawn for State *A*, where district lines are denoted by bold lines, therefore scores worse than the map drawn for State *B* on "efficiency gap," a simple measure of substantive partisan fairness. (The efficiency gap for State *A* is $1/3$, while the efficiency gap for State *B* is $1/6$.⁸⁸ A larger "efficiency gap" indicates a map that is more substantively unfair.⁸⁹) Yet, this apparent relative unfairness of map *A* stems from the natural packing of Democrat voters—not from any partisan manipulation on the part of the mapmaker who was simply trying to avoid creating a county split.⁹⁰

84. *Common Cause v. Rucho*, 279 F. Supp. 3d 587, 637, 690 (M.D.N.C.), *vacated*, 138 S. Ct. 2679 (2018); *Whitford v. Gill*, 218 F. Supp. 3d 837, 884, 898, 930 (W.D. Wis. 2016), *vacated*, 138 S. Ct. 1916 (2018).

85. *Rucho v. Common Cause*, 139 S. Ct. 2484, 2508 (2019).

86. See Jowei Chen & Jonathan Rodden, *Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures*, 8 Q.J. POL. SCI. 239, 240 (2013).

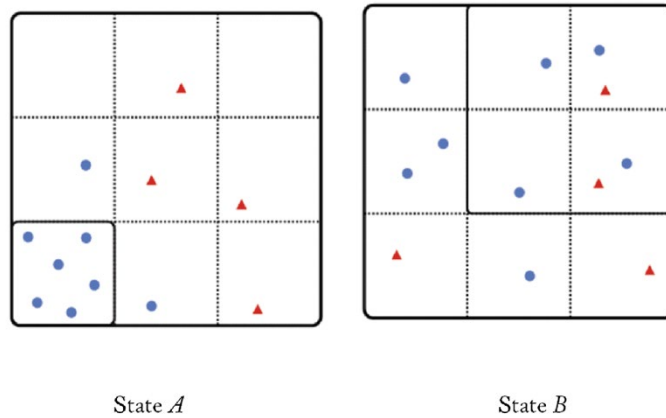
87. These figures originally appeared in Ramachandran & Gold, *supra* note 9, at 290–91.

88. See *id.* at 291 (showing the calculations).

89. See Stephanopoulos & McGhee, *supra* note 30, at 834 (defining the efficiency gap and explaining why larger efficiency gaps are indicative of a more unfair map).

90. Ramachandran & Gold, *supra* note 9, at 291.

Figure 1.



Motivated by this challenge, mathematicians have developed methods intended to be useful in proving and assessing partisan gerrymandering but that could also be applied to solve the problem of compliance with the Voting Rights Act and Equal Protection Clause. They create ensembles of maps that incorporate the many criteria mapmakers must take account of, while notably leaving out partisan goals. These map ensembles are then scored along whatever measure of substantive fairness is desired, say proportionality,⁹¹ or efficiency gap, or mean-median gap.⁹² The map being challenged in litigation is then compared to the distribution of scores that the ensemble of maps produces, to check if it is an outlier.⁹³ A visual depiction of one distribution of scores for one such ensemble is reproduced in figure 2. It was provided by Jonathan Mattingly in his expert report⁹⁴ before the three-judge panel in *Common Cause v. Rucho*,⁹⁵ the North Carolina case eventually dismissed as nonjusticiable by the Supreme Court.⁹⁶

91. Proportionality as a measure of substantive, partisan fairness compares the proportion of seats a party obtains to the proportion of votes it received. If the seat share is close to the vote share, the map is considered fairer. *See id.* at 289–90 (explaining the proportional representation measure in more detail).

92. Mean-median gap as a measure of substantive, partisan fairness compares the mean share of votes received by a party in each district to the median share of votes received by that party in each district. The larger the gap between these two, the more unfair the map is considered likely to be. *See* Michael D. McDonald & Robin E. Best, *Unfair Partisan Gerrymanders in Politics and Law: A Diagnostic Applied to Six Cases*, 14 ELECTION L.J. 312, 312–14 (2015) (defining the mean-median gap measure and explaining what its results mean).

93. *See* Ramachandran & Gold, *supra* note 9, at 293–98.

94. Declaration of Jonathan Mattingly, Exhibit 2, at 4, *Common Cause v. Rucho*, 279 F. Supp. 3d 587 (M.D.N.C. 2018) (No. 1:16-CV-1026-WO-JEP) [hereinafter Mattingly Report].

95. 279 F. Supp. 3d 587 (M.D.N.C.), *vacated*, 138 S. Ct. 2679 (2018).

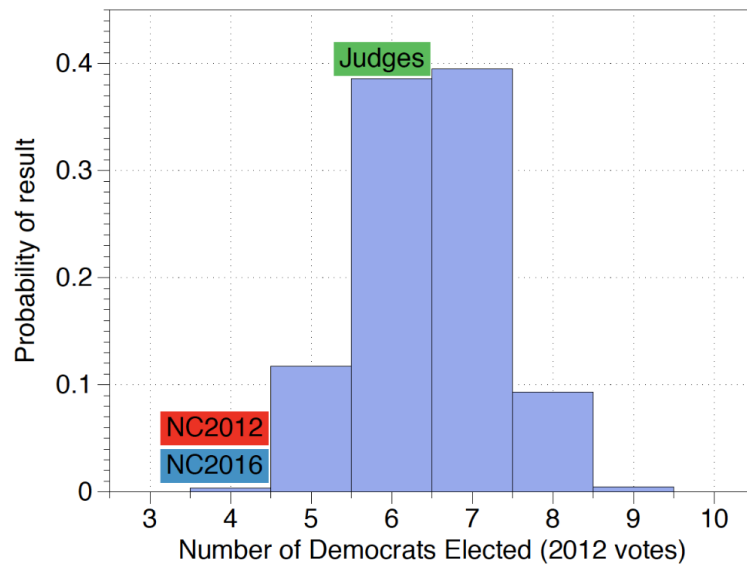
96. *Rucho v. Common Cause*, 139 S. Ct. 2484, 2508 (2019).

The distribution uses as its “score” for substantive fairness the number of Democrats that would have been elected under a given map in 2012. In other words, each map in the ensemble that Mattingly created was scored on that basis. As one can see from the image, for slightly more than 10% of the maps in the ensemble, five Democrats would have been elected. For slightly under 40% of the maps in the ensemble, six Democrats would have been elected. For about 40% of the maps, seven Democrats would have been elected. The marker “Judges” in figure 2 indicates how a map that was drawn by a “simulated bipartisan redistricting commission of retired North Carolina judges as part of the ‘Beyond Gerrymandering’ project at Duke University”⁹⁷ compares to the ensemble. The judges’ map would have resulted in six Democrats being elected in 2012, a result that is typical as compared to the ensemble, in which the vast majority of maps result in six or seven Democrats being elected in 2012. The markers NC2012 and NC2016 show how the actual maps enacted by the North Carolina legislature in 2011⁹⁸ and 2016 compare to the ensemble. These maps would have resulted in only four Democrats being elected in 2012, a result that almost never happened in Mattingly’s ensemble, as we can see from the fact that the percentage of maps in which four Democrats would have been elected is so small as to be almost indiscernible. Thus, the legislature’s maps are quite extreme outliers compared to the ensemble, while the judges’ map is quite typical.

97. Mattingly Report, *supra* note 94, at 1.

98. The map enacted in 2011 was used in the 2012 elections, thus Mattingly chose to depict it as NC2012 in his image. *Id.* at 1, 4.

Figure 2.



So long as the ensemble of maps created for this sort of outlier analysis incorporates legitimate districting criteria, those districting criteria cannot serve as an excuse for the fact that the map is a partisan outlier.⁹⁹ And, since the entire ensemble was created for the particular state at issue, that state's particular geography and demography cannot serve as an explanation either. In other words, the sort of natural packing exhibited in our hypothetical "State A" map in figure 1 cannot be the explanation for why a challenged map is an outlier, since the entire ensemble takes into account where the voters in the state reside.

Essentially, this approach controls for legitimate districting criteria as well as the state's particular geography and demography. The technique is analogous to well-established methods for proving employment discrimination: Simulate hiring, promotion, or some other employment practice in the absence of discrimination, in order to create a distribution of what these practices would look like in the absence of discrimination. Compare the defendant-employer's *actual* hiring results to that distribution, and if those outcomes constitute enough of an outlier, the factfinder is permitted to infer that discrimination is the reason for the outlier result.¹⁰⁰

In the context of redistricting, however, creating the ensemble of maps to which the challenged map is compared constitutes an incredible computational challenge. The number of ways to assign precincts, census blocks, or some other

99. See *id.* at 16 (detailing the districting criteria incorporated into the ensemble).

100. See, e.g., *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 301–13 (1977); *Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 334–56 (1977).

voter-tabulation district into electoral districts is massive. Indeed, it is so large that the full set of ways cannot be fully enumerated using current computing capabilities.¹⁰¹ There are nearly 290,000 census blocks in North Carolina,¹⁰² which must be assigned to thirteen congressional districts. When additional restrictions are placed on these assignments, such as population equality across electoral districts¹⁰³ or contiguity of electoral districts,¹⁰⁴ and when additional criteria are considered, such as avoidance of breaking county and other jurisdictional lines,¹⁰⁵ then the problem of ensuring that one is sampling from the full set of reasonable, legally valid maps—the target “map-space”—becomes even more challenging.

In response to this challenge, a number of the leading methods of outlier analysis have applied MCMC methods.¹⁰⁶ These methods are sometimes modified for seeking as optimal a solution as is available but were originally proven to solve the problem of sampling from the target map-space. One example can be summarized as follows: Start with a seed map. Change that map slightly, for instance, by moving a census block out of one district and into an adjacent district. Assess whether this new, proposed map is better than the old map by scoring the maps with a weighted sum of various criteria that one can

101. Wendy K. Tam Cho & Yan Y. Liu, *Toward a Talismanic Redistricting Tool: A Computational Method for Identifying Extreme Redistricting Plans*, 15 ELECTION L.J. 351, 353 (2016). For instance, if we want to divide fifty census blocks into five districts, we are attempting to partition a set of $n = 50$ blocks into $k = 5$ non-empty subsets, or districts. The number of distinct ways to perform this partition is described as the “Stirling number of the second kind,” or $S(n, k)$ where $n = 50$ and $k = 5$. For a description of Stirling numbers of the second kind, see Eric W. Weisstein, *Stirling Number of the Second Kind*, WOLFRAMMATHWORLD (last updated Sept. 6, 2019), <http://mathworld.wolfram.com/StirlingNumberoftheSecondKind.html> [<https://perma.cc/8E63-CHXA>]. For $n = 50$ and $k = 5$, the number of ways to partition the set is a bit more than 7.4×10^{32} . See *Stirling Numbers of the 2nd Kind (Table) Calculator*, KEISAN ONLINE CALCULATOR, <https://keisan.casio.com/exec/system/1292214964> [<https://perma.cc/U79E-KGRF>], for a calculator for this purpose.

102. *Geographies: 2010 Census Tallies*, U.S. CENSUS BUREAU, <https://www.census.gov/geographies/reference-files/time-series/geo/tallies.html#> [<https://perma.cc/QE5R-HAF6>].

103. See, e.g., *Reynolds v. Sims*, 377 U.S. 533, 563 (1964).

104. Many states require that districts be contiguous, i.e., that there be no geographic separation of one portion of a district from the rest of the district. E.g., CAL. CONST. art. XXI, § 2(d)(3) (“Districts shall be geographically contiguous.”); HAW. REV. STAT. § 25-2(b)(2) (2018) (providing an exception to the contiguity requirement for districts that encompass more than one island).

105. Many states require that these types of jurisdictional splits be minimized. E.g., ARIZ. CONST. art. IV, pt. 2, § 1(14)(E) (“To the extent practicable, district lines shall use visible geographic features, city, town and county boundaries, and undivided census tracts . . .”). House Bill 1 currently requires that the splitting of certain communities, including jurisdictional units, be minimized, although it includes within the list of communities that should not be split ethnic communities, which could ironically lead to overpacking of these groups to their detriment, in violation of the Equal Protection Clause and the VRA. See For the People Act of 2019, H.R. 1, 116th Cong. § 2413(a)(1)(D) (2019) (“Districts shall respect communities of interest, neighborhoods, and political subdivisions to the extent practicable . . .”).

106. See Ramachandran & Gold, *supra* note 9, at 295–97 (citing examples of MCMC methods being applied to the districting problem).

code into the algorithm in advance. These criteria might be compactness, amount of county splitting, population equality, etc. If the new proposed map is better according to this weighted sum, move to the new map, and add it to the ensemble. If the new proposed map is worse, flip a weighted coin to decide whether to move to the new map, and add it to the ensemble. The coin is weighted according to the ratio of the new map's weighted sum and the old map's weighted sum.¹⁰⁷ This MCMC method will, if run for long enough, sample from the probability distribution of all the maps, weighted by the criteria chosen in advance.

However, it is not known for how long such an algorithm must run in order to representatively sample from the map-space. If infinite computing time is not available, as of course it never is, various modifications can be made to increase our confidence that the method is sampling rather than getting “stuck” shifting between maps that are quite similar to each other.¹⁰⁸ There are also various rough methods that can be used to eyeball whether an MCMC-style algorithm is in fact exploring the map-space rather than getting stuck. These methods do not come with mathematical proofs of their accuracy, but as applied to the problem of creating a map-ensemble, they can be used to get a reasonable assessment of whether the algorithm is moving flexibly about the map-space, capturing different parts of the space, or is instead getting stuck in “plateaus” or “valleys” in the map-space. As just one example, in Mattingly's expert report in *Common Cause v. Rucho*, he describes how his team “animated” the visual maps as the algorithm moved through the map-space and was able to observe that “districts may travel from one end of the state to another.”¹⁰⁹ This increased his confidence that “many types of redistrictings [were] sampled.”¹¹⁰

Importantly for their use in redistricting by commissions, MCMC-inspired methods flexibly incorporate criteria that are set according to the

107. *Id.* at 295. The method description has been very abridged here for a nontechnical audience. In practice, for instance, maps are sometimes thrown out of the ensemble because they do not meet some threshold on a particularly rigid criterion, such as population equality across districts. *See, e.g.*, Mattingly Report, *supra* note 94, at 15–16 (explaining the “rejection sampling” process). Some researchers have also tried changing maps more aggressively by periodically, or with some element of chance during the random walk, selecting larger chunks of units and reassigning them across two districts rather than flipping one unit at a time. *See, e.g.*, METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 13 (describing this method as the “ReCom” method and showing how it more effectively traverses the map-space). Researchers will also often vary the “acceptance” ratio, experimenting with making it more or less likely that the algorithm moves to a map with a worse weighted sum than the current map. *See, e.g.*, Mattingly Report, *supra* note 94, at 14 (describing this process, called “annealing”). In other words, how willing the algorithm is to explore a portion of the map-space with poor maps, in the hopes that this could lead to an area of the space with good maps, is varied in order to find a degree of “willingness” under which high quality, but truly different, maps are found quickly enough.

108. *See* Ramachandran & Gold, *supra* note 9, at 293, 296.

109. Mattingly Report, *supra* note 94, at 20.

110. *Id.*

wishes of the mapmaker. The mapmaker can weight the criteria as desired, can add and subtract criteria, and can define criteria.¹¹¹ Thus, commissions could use MCMC-inspired methods to create ensembles of maps that take account of all the state's legitimate districting criteria, and they can score those maps using reasonable substantive fairness metrics, such as how many Democrats or Republicans would be elected using that map, proportionality, or efficiency gap. Since commissions are not only trying to discover and avoid partisan gerrymanders but may also be trying to achieve substantive fairness as a positive goal, they could even use MCMC methods for the purpose of choosing the fairest maps they can find: seeking the best possible solution rather than sampling to prove a challenged map is an outlier. They could do this by coding fairness metrics into the algorithm's weighted scoring function. The algorithm would then be searching for substantively fair maps, taking other legitimate criteria into account at the same time. After running the MCMC process for long enough, the commission can choose the map with the best weighted sum, or at least pick from a small collection of maps with the highest weighted sums.¹¹² This is promising and exciting in and of itself, but in the next section, I explain how MCMC-type methodologies can be applied to solve a different, and perhaps even more pressing, problem¹¹³: squaring the Voting Rights Act with the Equal Protection Clause, or, put differently, reconciling anticlassification and anticlassification goals in redistricting.

B. *The Caselaw's Treatment of Analogous Methods*

Congress can, in House Bill 1, provide commissions with standards for how to thread the racial gerrymandering needle, incorporating the best available ensemble methods, which can accommodate the consideration of minority rights in a constitutional manner, by ensuring that other districting criteria are

111. *Id.* at 20–22.

112. Unfortunately, some rules governing redistricting commissions, including the proposed rules in House Bill 1, prohibit the consideration of voting histories and partisan registrations in developing maps. For the People Act of 2019, H.R. 1, 116th Cong. § 2413(a)(3) (2019). These laws should be amended to permit consideration of that data for the purpose of achieving, or at least checking for, partisan fairness.

113. The problem of obtaining maps that are fair in the partisan sense may be reasonably well solved by the use of independent redistricting commissions alone. Not much study of these commissions' success has been done, but one study by the Public Policy Institute of California provides reason to believe these commissions will likely improve the problem of partisan gerrymandering, although they may not be able to fully eradicate it without use of methods, such as MCMC methods, to "check" that their work has neutral results. *See* MCGHEE, *supra* note 16, at 5–6. On the other hand, without intervention by Congress, it is reasonable to think that section 2 of the VRA may be either struck down under the Equal Protection Clause as beyond Congress's enforcement powers or gutted to the point that it no longer provides protection to historically subordinated groups, becoming largely a tool to cover up and excuse partisan gerrymandering. *See* Pildes, *supra* note 32, at 1552.

not subordinated to the promotion of minorities' voting power. These methods can avoid race becoming the dominant factor¹¹⁴ in any chosen district map.

In fact, in other contexts, this is exactly the type of use of race that has been understood to be acceptable under the Equal Protection Clause. Race-based action has been more likely to be upheld when the magnitude of the weight given to race is not too high and does not outweigh other state interests. For instance, in *Fisher v. University of Texas at Austin*,¹¹⁵ the Supreme Court upheld Texas's use of individualized race-based affirmative action in university admissions, just as it had upheld the University of Michigan Law School's similar use of race in *Grutter v. Bollinger*.¹¹⁶ In both cases, part of the reason the Court was willing to treat the policies as narrowly tailored to the compelling state interest of diversity in higher education was that the policy did not treat any student's race as a dispositive factor.¹¹⁷ Rather, each student was looked at holistically, with race taken into account alongside other important factors such as economic class, musical skill, and the like.¹¹⁸ At the same time, the University of Michigan's undergraduate admissions policy, which took into account all these factors but weighted race too heavily, such that it outweighed all other factors, was struck down by the Supreme Court.¹¹⁹

Additionally, in some other contexts, federal judges have given strong indications that *structural, advance* attention paid to race in order to ensure a policy does not harm subordinated groups or lock in the status quo would be acceptable under the Equal Protection Clause. Justice Kennedy, in both *Ricci v. DeStefano*¹²⁰ and *Parents Involved in Community Schools v. Seattle School District No. 1*, indicated that he did not consider this type of attention to race to necessarily be discriminatory in the same way that basing government action on individual racial identities is discriminatory.¹²¹ In *Ricci*, he wrote that the City of New Haven had violated Title VII's ban on intentional race discrimination when it threw out the results of a promotion test after seeing the racial identities of those who had performed better or worse.¹²² However, he took care to note

114. In order for race-based gerrymandering to be unconstitutional, race must be the primary motivating factor behind the choice of how to draw the offending district, in contrast to other contexts, in which race need merely be a motivating factor behind state action in order to trigger strict scrutiny. See *Shaw v. Reno*, 509 U.S. 630, 643–46 (1993) (analyzing redistricting specifically); *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 265–66, 270 (1977) (analyzing race-based state action more generally).

115. 136 S. Ct. 2198 (2016).

116. 539 U.S. 306 (2003).

117. *Fisher*, 136 S. Ct. at 2207; *Grutter*, 539 U.S. at 338–39.

118. *Fisher*, 136 S. Ct. at 2207; *Grutter*, 539 U.S. at 338.

119. *Gratz v. Bollinger*, 539 U.S. 244, 255, 270 (2003).

120. 557 U.S. 557 (2009).

121. *Id.* at 585; *Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1*, 551 U.S. 701, 788–89 (2007) (Kennedy, J., concurring).

122. *Ricci*, 557 U.S. at 579, 593.

that it would and should be acceptable for the city, before administering such a test, to analyze the potential racial impacts of the test and take that into account when deciding whether or not to use the test.¹²³ In *Parents Involved*, he agreed that using a student's race as a tiebreaker in determining which school the student would be assigned to should be subject to strict scrutiny under the Equal Protection Clause, and that it failed that scrutiny.¹²⁴ However, he concurred separately to note that it would be acceptable for a school district to look at racial demographics when deciding where to build new school sites and where to draw attendance zone boundaries, for the purpose of achieving diverse, racially integrated schools.¹²⁵ He stated that it was "unlikely" such actions "would demand strict scrutiny,"¹²⁶ even though, ever since 1989, the federal courts have applied strict scrutiny to race-based action, even when it is performed to benefit racial minorities.¹²⁷

More recently, in *Fisher*, the Court approvingly discussed the fact that individualized use of race was minimized in the University of Texas's affirmative action program by using a formally race-neutral program to fill most of the student body's slots, even though that program was concededly intended to achieve certain racial effects.¹²⁸ That program, often called the "Top Ten Percent Plan," guarantees admission to students who perform at the top of their high school class.¹²⁹ Because Texas public schools remain quite racially segregated, this results in racially diverse admitted classes.¹³⁰ Even as the individualized, holistic race-based program for the other slots was upheld in *Fisher*, the Court conceded that the Top Ten Percent Plan was purposefully race-conscious, and stated that as such, using it for all slots would not be "more race neutral."¹³¹ Yet, the existence of the Top Ten Percent Plan was deemed a *positive* thing, in that it diminished the need for the use of different treatment based on individual students' races.¹³²

123. *Id.* at 585.

124. *Parents Involved*, 551 U.S. at 733–35, 782 (explaining, in a portion of the Court's opinion with which Justice Kennedy concurred, that the consideration of race was not narrowly tailored because "[t]he districts have . . . failed to show that they considered methods other than explicit racial classifications to achieve their stated goals").

125. *Id.* at 788–89 (Kennedy, J., concurring).

126. *Id.* at 789.

127. *City of Richmond v. J. A. Croson Co.*, 488 U.S. 469, 493–94 (1989).

128. *Fisher v. Univ. of Tex. at Austin*, 136 S. Ct. 2198, 2213 (2016) ("[T]he Top Ten Percent Plan, though facially neutral, cannot be understood apart from its basic purpose, which is to boost minority enrollment.").

129. *Id.*

130. *Id.*

131. *Id.*

132. *Id.* at 2212 ("The fact that race consciousness played a role in only a small portion of admissions decisions should be a hallmark of narrow tailoring, not evidence of unconstitutionality.").

Of course, it is unlikely that if a school district purposely drew its attendance zones in order to achieve segregation, or if a city chose an employment test because it would impact African Americans negatively, or if a state university engaged in a “top ten percent” program because it would reduce admissions for people of color, that Justice Kennedy would have considered such actions anything other than odious race discrimination violating multiple laws, including the Constitution. Thus, we should read Justice Kennedy’s musings in these cases as indicating that there is in fact room, in the eyes of those who subscribe to anticlassification values, for structural, demography-based affirmative action that does not cause large, individualized harms and benefits.

And this view is not just a quirk of Justice Kennedy, who of course is no longer on the Supreme Court. For years, the Supreme Court has admonished government actors engaged in race-based affirmative action to consider structural, formally race-neutral alternatives, such as class-based rather than race-based affirmative action. In *City of Richmond v. J. A. Croson Co.*¹³³ and *Adarand Constructors, Inc. v. Peña*,¹³⁴ the Court promoted these alternatives as actions the government defendants should have taken in order for their actions to be deemed “narrowly tailored,” and thereby pass muster under strict scrutiny.¹³⁵ Yet those alternatives would clearly be intended to achieve benefits for racially subordinated groups.¹³⁶

Finally, the Supreme Court has permitted race-conscious action in redistricting to a degree unmatched in any other context because it has held that in order to trigger strict scrutiny, race must be the *primary* motivating factor,¹³⁷ rather than merely *a* motivating factor, which is all that is required in every other context under the Equal Protection Clause.¹³⁸ Recently, the Court has described the harm of racial gerrymandering as “being personally subjected to a racial classification as well as being represented by a legislator who believes his primary obligation is to represent only the members of a particular racial group.”¹³⁹

If we put all this together, it appears that redistricting that is cognizant of the impacts of district lines on racial communities, and that purposely seeks to avoid any negative impacts on those communities in the form of less

133. 488 U.S. 469 (1989).

134. 515 U.S. 200 (1995).

135. *Id.* at 237–38; *Croson*, 488 U.S. at 498, 507.

136. See Richard A. Primus, *Equal Protection and Disparate Impact: Round Three*, 117 HARV. L. REV. 494, 556–57 (2003).

137. *Easley v. Cromartie*, 532 U.S. 234, 257 (2001) (“[T]he party attacking the legislature’s decision bears the burden of proving that racial considerations are ‘dominant and controlling’” (quoting *Miller v. Johnson*, 515 U.S. 900, 913 (1995))).

138. *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 265–66, 270 (1977).

139. *Bethune-Hill v. Va. State Bd. of Elections*, 137 S. Ct. 788, 797 (2017).

opportunity to elect preferred candidates than other communities have, should be acceptable under the Equal Protection Clause to many, including those who subscribe to an anticlassification view of equal protection, so long as the desire to create opportunity districts does not outweigh other legitimate and important districting criteria. Such activity in redistricting is structural, just like Justice Kennedy's proposed redrawing of attendance zones in order to achieve integration. It does not assign any voter to a district or exclude any voter from a district because of his or her individual race. The cognizance of race is at the demographic level. Moreover, the cognizance of race is not outsized, unlike the points assigned to race in *Gratz v. Bollinger*¹⁴⁰ that outweighed all other factors for students who were otherwise qualified for admission.¹⁴¹ In the past, it has been difficult to quantify the relative weight given to racial communities and their representation in the redistricting process. But now, commissions and mapmakers can use MCMC-style methods to ensure all criteria are considered and that no one criterion is given outsized weight, and seek to achieve maps that perform well on all criteria. The ensembles they create can be assessed to ensure that outlier maps on criteria like partisan fairness are not chosen in order to achieve minimal benefits on the criterion of opportunity for minority communities.

Indeed, even *without* congressional clarification, there is a strong argument that when a redistricting commission uses MCMC-style algorithms to consider a variety of significantly different yet reasonable maps, it need not justify efforts to ensure equal opportunity for minority communities on the grounds that those communities have a section 2 right under the standards the federal courts have set. Part of the reason why the federal courts have chosen an incredibly narrow definition of when a community has the right to an opportunity district under section 2 is because they understand opportunity-district creation to be an activity that necessarily triggers strict scrutiny. It must, on this analysis, be severely limited in order to remain narrowly tailored to some compelling interest such as remedying past, intentional racial discrimination in voting.¹⁴² But the latest mathematical methods can be used to choose maps that are beneficial to racial minorities without making race so primary—without subordinating other criteria to race. As the Supreme Court has conceded, it is impossible to be completely race-blind, at least when engaging in redistricting.¹⁴³

140. 539 U.S. 244 (2003).

141. *Id.* at 271–72.

142. *See* *Abbott v. Perez*, 138 S. Ct. 2305, 2315 (2018).

143. *See* *Bethune-Hill*, 137 S. Ct. at 797; *Easley v. Cromartie*, 532 U.S. 234, 242, 245, 258 (2001).

III. MATH FOR THE PEOPLE: HOW TO RECONCILE ANTISUBORDINATION AND ANTICLASSIFICATION IN REDISTRICTING

House Bill 1, the For the People Act passed by the House of Representatives, currently contains a great level of procedural detail to operationalize independent redistricting commissions across the nation, via a detailed section called “The Redistricting Reform Act of 2019.”¹⁴⁴ Like most independent commission statutes or initiatives, it also mandates Voting Rights Act and constitutional compliance in redistricting as the two highest-priority criteria to which commissions must subject maps.¹⁴⁵ However, it fails to provide any instruction to commissions on *how* to thread that needle, and at least so far, it makes no substantive amendments to the VRA.¹⁴⁶ It even contains some language that could inadvertently promote overpacking of racial and ethnic minorities, which would needlessly dilute their voting power.¹⁴⁷

Fortunately, the recent advances of mathematicians and political scientists working on the problem of partisan gerrymandering could be employed to fulfill the duty to protect minority voters while still complying with the Constitution. As I detail in the next sections, with just a few improvements, the Redistricting Reform Act could help redistricting commissions take advantage of these advances in order to protect minority voting power while also staying within constitutional guidelines.

A. *What Math for the People Can Do*

Many of the mathematicians using outlier analysis in partisan gerrymandering litigation were seeking to represent the full space of reasonable, valid maps as well as possible maps in order to demonstrate that a challenged map was an outlier among that space in terms of partisanship. Thus, they developed methods that sought to create not only large *numbers* of such maps but many different *types* of such maps, meaning maps that occupy very different parts of the “map-space” of all reasonable and valid maps.¹⁴⁸ They have also

144. For the People Act of 2019, H.R. 1, 116th Cong. §§ 2400–2415 (2019).

145. *Id.* § 2413(a)(1)(A)–(B).

146. The Act calls for reauthorization of the VRA but has no actual findings or proposed alterations to the substantive text yet. The Supreme Court’s decision in *Shelby County v. Holder*, 570 U.S. 529 (2013), is explicitly criticized, but there is no mention of *Thornburg v. Gingles*, 478 U.S. 30 (1986), or *Bartlett v. Strickland*, 556 U.S. 1 (2009). H.R. 1 § 2001.

147. H.R. 1 § 2413(a)(1)(D) (stating that districts must minimize the division of “communities of interest, neighborhoods, and political subdivisions to the extent practicable” and that “[a] community of interest . . . includ[es] . . . ethnic, racial, economic, social, cultural, geographic or historic identities”).

148. See Ramachandran & Gold, *supra* note 9, at 296–97 (first citing Yan Y. Liu, Wendy K. Tam Cho & Shaowen Wang, *PEAR: A Massively Parallel Evolutionary Computation Approach for Political Redistricting Optimization and Analysis*, 30 SWARM & EVOLUTIONARY COMPUTATION 78, 82–86 (2016); and then citing Sachet Bangia et al., *Redistricting: Drawing the Line* 16–18 (arXiv, Paper No. 1704.03360v2, May 8, 2017), <https://arxiv.org/pdf/1704.03360v2.pdf> [<https://perma.cc/6L3B-GGXE>]).

refined those methods to increase confidence that the methods are not getting “stuck” in one particular part of the map-space.¹⁴⁹ This quality of MCMC-type methods, that they can discover many significantly different maps, can be an extremely useful quality outside of litigation. Rather than creating an ensemble of hopefully representative maps, in order to prove that a particular map is an outlier, one can use these methods to obtain many significantly different, yet still reasonable, maps.

By significantly different, I mean maps that differ in terms of where the cores of districts are located. Such maps are meaningfully different from each other in the sense that they could potentially lead to different political outcomes—different candidates being elected or at least running for office, or different coalitions of interest groups finding it promising to work together. If a person who is well-informed on the politics of a particular state were shown two maps that are identical, save for the fact that two census blocks are switched, he or she would not consider those two maps significantly different. He or she would also not find those two maps significantly different even if thousands of blocks were switched, but all such blocks were along the borders of the districts, thereby leaving the central cores of each district intact. But if the central core of one district in Map 1 were divided into two portions, with each portion being assigned to different districts in Map 2, then an informed person might well predict that Map 2 leads to significantly different political activity and outcomes as compared to Map 1, since the voters in that central core are no longer as motivated to form political coalitions with each other, as they are in different districts. They are now more motivated to form coalitions with voters that were previously not in the same district as them.

By reasonable maps, I mean maps that are legally valid because they comply with the relevant state and federal criteria. For instance, maps are not reasonable if they do not exhibit something very close to exact population equality across districts, as that is a requirement of the Federal Constitution.¹⁵⁰ A map would also not be reasonable if it scored extremely low compared to other maps on various measures of compactness in a state where the redistricting entity is required to take the compactness of districts into account. Similarly, a map would not be reasonable if it split twelve counties into multiple districts, in a state where the law required minimization of county splits, and where many other maps could be found that only split two counties into multiple districts without sacrificing any of the even more rigid criteria such as population equality.

149. See Mattingly Report, *supra* note 94, at 15–16; METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 4, 12–13.

150. See *Reynolds v. Sims*, 377 U.S. 533, 557–58 (1964) (articulating the one-person, one-vote standard).

Because the best of the ensemble production methods, including MCMC-style methods, obtain a large variety of significantly different yet reasonable maps,¹⁵¹ if we put them to use in redistricting, we can have much greater confidence than before that we are not missing out on maps with more rather than fewer opportunity districts. Indeed, the Metric Geometry and Gerrymandering Group, using a sophisticated MCMC-style method,¹⁵² has found that a potentially larger number of opportunity districts were available in the Virginia House of Delegates than even the Democratic Governor, who was seeking a remedy to a court-determined racial gerrymander,¹⁵³ had proposed. In this report, the authors found a number of maps with fourteen districts—and some with fifteen or sixteen districts—that contained a Black Voting Age Population (“BVAP”) of over 37%.¹⁵⁴ In contrast, the Democratic Governor’s proposed remedial plan had only thirteen districts with BVAP over 37%, while the originally enacted plan that had been found to intentionally overpack African American voters had twelve such districts.¹⁵⁵ The authors noted that thirty-two of thirty-four federal congressional districts with BVAP over 37% are represented by members of the Congressional Black Caucus, and argued that, in combination with expert testimony on racially polarized voting in Virginia that had been presented at trial, 37% was a reasonable cutoff for considering a district to be a potential opportunity district.¹⁵⁶ All the maps the authors found with BVAP over 37% were part of an ensemble of maps that take into account the state’s legitimate districting criteria.¹⁵⁷

Moreover, for a mapmaker working by hand, trying to determine how many opportunity districts can be created, the Equal Protection Clause serves as a constant, nagging reminder that even as one tries to create opportunity districts, one may not let race dominate one’s thoughts, and one may not subordinate other legitimate districting principles, such as avoiding county splits, to race. But MCMC methods and other forms of ensemble production

151. See Mattingly Report, *supra* note 94, at 20 (describing testing the algorithm and being able to visualize districts moving from one end of the state to another as the process iterates); METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 12–13, 15 (describing various measures the group used to test whether their methods were sampling effectively and finding a particular mixed methodology to work the best).

152. METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 13 (describing a novel and highly effective “ReCom” MCMC method for traversing the map-space, in which chunks of units are reassigned between two districts at once, rather than only one or two units being switched between districts at a time).

153. See *Bethune-Hill v. Va. State Bd. of Elections*, 326 F. Supp. 3d 128, 175 (E.D. Va. 2018).

154. See METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 5.

155. See *Bethune-Hill*, 326 F. Supp. 3d at 178; METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 6.

156. METRIC GEOMETRY & GERRYMANDERING GRP., *supra* note 9, at 3–4 (citing the expert report of Maxwell Palmer).

157. *Id.* at 3 & n.3 (listing the criteria that were coded into the process, such as contiguity, population equality, and minimization of municipal splits).

can completely avoid this tension by finding maps that both minimize vote dilution for communities with a section 2 right¹⁵⁸ and perform quite well, if not extremely well, on other legitimate districting criteria. As the various criteria, including creating opportunity for voters with a section 2 right, are assigned weights, the mapmaker can ensure that the weight on this “minority protection” factor is lower than other criteria that are even higher priority, such as population equality. The mapmaker can also ensure that the weight is lower than the combined weight of other criteria, such as compactness and minimizing county splitting.

Exactly when a community has a section 2 right can be understood under current law as articulated in *Gingles*, or, ideally, under slightly broader conditions that Congress should clarify, as I have argued above. But either way, once such a community is identified, the newest ensemble methods allow mapmakers to work to create an opportunity district for that community without subordinating that goal to other, legitimate districting criteria, thereby avoiding an Equal Protection Clause violation. If multiple criteria are considered and valued simultaneously, and if the weight assigned to benefiting racial minorities is not outsized,¹⁵⁹ then that factor should not be understood to be the dominant motivating factor behind any chosen map. Other factors have not been subordinated to race.

B. *Proposed Amendments to the “For the People Act”*

Commissions need tools to avoid accidentally choosing maps that are unfair in both a partisan sense and that underprotect or overpack minority communities. They also need to be able to do so without committing an Equal Protection Clause violation. House Bill 1 provides for \$150,000 per congressional district (when a state has more than one district) for these commissions to do their work but so far fails to specify what should be done with that money.¹⁶⁰ House Bill 1 should be amended as follows:

1. Fairness Should Be Assessed According to the Best Available Mathematical and Scientific Methods

First, the statute should both permit and require commissions to employ sound mathematical and scientific methods to assess the fairness of maps, as well as to assist in discovering maps that better comply with all the relevant criteria, state and federal. In its current form, the bill does not permit the

158. See, e.g., *Abbott v. Perez*, 138 S. Ct. 2305, 2314, 2335 (2018) (using similar language).

159. Compare *Grutter v. Bollinger*, 539 U.S. 306, 338, 343 (2003) (upholding use of race in law school admissions), with *Gratz v. Bollinger*, 539 U.S. 244, 275 (2003) (forbidding outsized use of race in undergraduate school admissions).

160. For the People Act of 2019, H.R. 1, 116th Cong. § 2431 (2019).

consideration of partisan affiliation or voting histories in developing maps,¹⁶¹ but this needs to be amended to permit commissions to use this data for the limited purpose of seeking to achieve more fair maps, or at least to check their work and ensure they have not created a partisan outlier, perhaps through capture by partisans attempting to influence the commission.

Beyond this basic permission to use partisan data for fairness goals, the statute should require the use of sound methods. One way to carry out this mandate is via the Election Assistance Commission (“EAC”). In its current form, House Bill 1 reauthorizes the EAC, which is a nonpartisan agency that was created in the Help America Vote Act of 2002¹⁶² to, among other things, assist states with election security and integrity, upgrade voting systems, and ensure registration administration is compliant with federal law.¹⁶³ The agency has had its funding reduced to almost nothing, and there have been attempts to abolish it.¹⁶⁴ Much attention has been paid to the need to renew authorization to the agency and fund it appropriately in an age of heightened security and election-integrity concerns.¹⁶⁵ But House Bill 1 can go further and empower the agency to promulgate guidance, or even regulations, carrying out the Redistricting Reform Act. In particular, the agency should be empowered to specify methods that state commissions should use to assess the fairness of maps.

For instance, the agency could provide that commissions

must employ an MCMC-style method, or one similarly accepted in the mathematical community, for creating map ensembles. They must consider the distribution of these maps on the metrics of efficiency gap, competitiveness, and partisan skew, and they must choose a map that falls within the first and third quartiles on each of those distributions.

Or, the agency could provide that commissions

must use an MCMC-style method, or one similarly accepted in the mathematical community, to pick the best available map on all relevant state and federal criteria. They must code reasonable partisan fairness metrics as a criterion in their algorithm, with a minimum relative weight of twice any federally optional criteria.

161. *Id.* § 2413(a)(3)(B).

162. Pub. L. No. 107-252, 116 Stat. 1666 (2002) (codified as amended at 52 U.S.C. §§ 20901–21145 (2012)).

163. *See id.* § 202, 116 Stat. at 1673–74 (codified as amended at 52 U.S.C. § 20922).

164. *See* Russell Berman, *The Federal Voting Agency Republicans Want To Kill*, ATLANTIC (Feb. 13, 2017), <https://www.theatlantic.com/politics/archive/2017/02/election-assistance-commission-republicans-congress/516462/> [<https://perma.cc/LE2F-E9ZA>] (explaining that “[e]very odd-numbered year since 2011, Republicans in the House have tried to kill the Election Assistance Commission . . . [and] [t]his year, the same fight has taken on much greater urgency”).

165. *See id.*

This would ensure that maps are optimized for a variety of factors but with a relatively high weight given to partisan fairness, along with significant weight given to the other legitimate criteria chosen by the state.

2. *Gingles* and Its Progeny, Designed for the Courts, Must Not Become Restraints on Redistricting Commissions

Second, the statute should not describe VRA compliance as a criterion that redistricting commissions should prioritize without further clarification of what that means. Since in its current form House Bill 1 does almost nothing to alter *Gingles* and *Strickland*'s interpretations of the Voting Rights Act, this criterion could be read to imply that states should *only* provide opportunity districts to those communities that could meet the current *Gingles* standard. But this would be far too restrictive, as described above, and it may even lead to overpacking. Instead, the criterion should state that

whenever minority racial, language, or ethnic communities have likely been less able to elect preferred candidates than other communities, commissions must avoid diluting their votes through unfavorable electoral maps and must instead employ the full array of sound mathematical and scientific methods to explore the possibility of opportunity districts for those communities.

The criterion should specify that

an opportunity district is one in which the community has equal opportunity to elect preferred candidates as other communities in the state have, either because the percentage of the voting age population in the district creates that opportunity, or because the electoral system used in the district, such as a multimember district with ranked choice voting, affords that opportunity.

The statute should also clearly specify that

it need not be possible to form a "majority-minority district" for such a community to be entitled to protection from dilution of that opportunity, particularly in coalition with other groups

and that

it is acceptable for commissions to create multimember districts with ranked choice voting as a means of affording minority voters opportunity.

While the bill in its current form permits of all these interpretations, and helpfully mentions that commissions "shall not dilute or diminish their ability

to elect candidates of choice whether alone *or in coalition with others*,¹⁶⁶ the Supreme Court has a history of reading progressive amendments to civil rights statutes narrowly, even when Congress explicitly calls out prior Supreme Court interpretations that it considers to be erroneous.¹⁶⁷ Thus, more specificity would be helpful.

3. Federal Law Should Not Mandate that Jurisdictional or Other Splits Be Avoided

Third, House Bill 1's language directing commissions to "respect communities of interest . . . to the extent practicable" should at least be changed to remove reference to ethnic minorities as examples of such communities that should not be split.¹⁶⁸ This language could easily be read by a court hostile to minority voting rights to imply that extreme packing of minorities is favored, which it should not be, as this leads to noncompetitive districts in which large numbers of minority voters must cast wasted votes.¹⁶⁹ Minority interest groups may have sought this language as an assurance that commissions would not harm the opportunity of minority communities to elect candidates of preference, but that reassurance can hopefully come from amending the bill, as I am proposing, to greatly strengthen the Voting Rights Act's assurance of equal opportunity and secure its constitutionality, not through language that could easily be used to harm minority communities through overpacking. Ideally, the criterion of minimizing division of communities would be deleted from House Bill 1 entirely. Not all states may believe that county splitting or the like is a severely negative quality in an electoral map, and there is no need to give such a criterion the importance potentially implied by the words "to the extent practicable." Such a criterion can, like any criterion, conflict with the much more universally important criteria of partisan fairness, protection of minority communities that have been historically subordinated, and population equality across single-member districts.

166. H.R. 1 § 2413(a)(1)(C) (emphasis added).

167. See Deborah A. Widiss, *Shadow Precedents and the Separation of Powers: Statutory Interpretation of Congressional Overrides*, 84 NOTRE DAME L. REV. 511, 513 (2009) ("Using examples from employment discrimination jurisprudence, this Article demonstrates that courts often continue to follow statutory interpretation precedents whose holdings have been repudiated by Congress.").

168. H.R. 1 § 2413(a)(1)(D).

169. Guinier, *supra* note 30, at 1592 (describing why such wasting is a harm).

4. The Statute Should Clarify What “Equal Opportunity” Means: A Typical Level of Competitiveness

Fourth, House Bill 1 should clarify what it means for a community to have equal opportunity to elect preferred candidates as other communities have,¹⁷⁰ and the EAC should be authorized to promulgate guidance or regulations that help commissions give this criterion some weight while also avoiding constitutional violations. This can be done as follows.

Consider that the percentage of votes a minority-preferred candidate receives in a particular district can be modeled extremely roughly as follows, for either the relevant primary election or the general election:

$$\text{Estimated Percent of Votes Minority-Preferred Candidate Gets} = MVAP \times ML \times MT + (1 - MVAP) \times CL \times CT$$

where,

MVAP = **Minority Voting Age Population**, a percentage that will depend on the borders of a district and census data

ML = **Minority Level**, the estimated level of support from minority voters that the minority-preferred candidate tends to get in elections.

MT = **Minority Turnout Level**, the historic turnout percentage of the minority community.

CL = **Coalition Level**,¹⁷¹ the percentage of “other” voters (both white and other minority group members) who, in a particular area, tend to prefer the same candidate preferred by the particular group of minority voters we are seeking to protect. (If these groups do not exhibit similar levels of support for the minority-preferred candidate, meaning the candidate preferred by the particular minority group we are seeking to protect, they should be broken down as necessary into CL_1, CL_2, \dots)

CT = **Coalition Turnout Level**, the historic turnout percentage of the “other” voters who are deemed willing to vote for the minority-preferred candidate. (Again, if these “other” voters are not similar in their levels of support/turnout, this can be broken down into CT_1, CT_2, \dots)

170. *Cf. Thornbug v. Gingles*, 478 U.S. 30, 47 (1986) (“The essence of a § 2 claim is that a certain electoral law, practice, or structure interacts with social and historical conditions to cause an inequality in the opportunities enjoyed by black and white voters to elect their preferred representatives.”).

171. Note that this number may be different for primary and general elections. For instance, some white Democrat voters may vote against the minority-preferred candidate in the primary election but be willing to vote for that candidate in the general election.

ML, MT, CL, and CT can be estimated based on historical data, using the type of expert reports that are now used in Voting Rights Act litigation.

Thus, the estimated percentage of votes a minority-preferred candidate gets in a district, in both the primary and general elections, can be targeted to the desired levels by altering the MVAP in the district. This is exactly what mapmakers do when seeking to create opportunity districts. They seek to create a district in which one expects the minority-preferred candidate to obtain some percentage of votes that is at least close to 50%, perhaps even higher. Litigants' experts often argue over their estimates of components such as CL—levels of support for the minority-preferred candidate from whites—and MT—levels of minority turnout—and especially how they might change with increased opportunity.¹⁷² Because they argue about these components, they argue about what MVAP is necessary to achieve that expected percentage of votes (around 50%) which leads to the preferred candidate winning at least some of the time.¹⁷³ For instance, in *Bethune-Hill v. Virginia State Board of Elections*,¹⁷⁴ a case challenging overpacking of minorities in Virginia, the trial court found:

[T]he 12 challenged districts, including District 75, varied widely in the extent to which white voters supported Democratic candidates, the party overwhelmingly preferred by black voters. Notably, in District 75, only 16% of white voters supported Democratic candidates, an extremely high level of racially polarized voting. . . . This data clearly showed that District 75 differed in important ways from the remainder of the challenged districts, and that District 75 required the highest BVAP level of any district. . . . Dr. Palmer also concluded, with 95% confidence, that a 55% BVAP in each of the 11 challenged districts would produce a Democratic vote share of at least 66.3% (in District 63), and as high as 83.7% (in District 71). . . . Accordingly, the 55% BVAP threshold was far greater than necessary for black voters to continue electing their preferred candidates.¹⁷⁵

If we set the MVAP too high, we are creating not just the opportunity for the minority-preferred candidate to be elected but in fact an “ultra-safe” district, which may harm that very same minority community by making it impossible to create a second, neighboring district where there is *also* opportunity to select another preferred candidate. Indeed, in the wake of the 1982 Amendments to section 2 of the Voting Rights Act, there was an incentive for incumbent

172. See, e.g., *Bethune-Hill v. Va. State Bd. of Elections*, 326 F. Supp. 3d 128, 178–79 (E.D. Va. 2018) (citing expert report of Maxwell Palmer to undermine Virginia's claim that a Black Voting Age Percentage of 55% or higher was necessary for VRA compliance).

173. See *Gingles*, 478 U.S. at 79 (stating that the “totality of the circumstances” should be assessed in making these determinations).

174. 326 F. Supp. 3d 128 (E.D. Va. 2018).

175. *Id.* at 178–79.

minority Democrat legislators to broker deals with incumbent Republican legislators that would overpack minorities in their districts, in order to increase the safety of many of the incumbents' seats, at the expense of Democrats as well as the minority voters themselves.¹⁷⁶

But outside the context of litigation, in which experts try to characterize the components of the prediction in ways favorable to the litigants' positions, there is a deeper question that Congress has never answered, and which they can answer now: What is the expected percentage of votes for the minority-preferred candidate that one should be targeting? Are multiple reasonably competitive districts better, or is one extremely safe district better? In other words, what level of competitiveness versus safety is right? House Bill 1 can specify that

in order for a minority group to have an equal chance to elect candidates of choice, opportunity districts must be created in which the level of competitiveness of the district is similar to the level of competitiveness nonminority voters would typically expect to experience.

The EAC should be authorized to promulgate guidance or even regulations governing how to estimate that level of competitiveness.

For instance, the EAC could specify a state-by-state procedure as follows: Commissions using MCMC-style ensembles and optimization techniques to select a high-quality map should, where possible, create an ensemble of maps that incorporates all relevant districting criteria without encoding the creation of opportunity districts as a districting criterion. The maps in these ensembles should be scored on average competitiveness in both primary and general elections of the resulting districts. Competitiveness levels between the fortieth and sixtieth percentile (or some other broader or narrower range) could be defined as an "opportunity range."

It may turn out that when this analysis is performed in many states the opportunity range does not vary significantly across the nation. (Currently, states in which one party has complete power over the redistricting process likely engage in greater degrees of partisan gerrymandering, and therefore have reduced numbers of competitive districts, as compared to states in which the governor and legislature are from opposing parties or states in which a nonpartisan redistricting commission is already in place.)¹⁷⁷ If that is the case, the EAC could promulgate simpler guidance, defining an "opportunity range" for the nation. The EAC should specify that a map that results in more districts in the opportunity range should score higher than a map that results in fewer

176. See Taylor, *supra* note 71 (describing what a Lawyer Committee for Civil Rights Under Law representative called "an unholy alliance").

177. See MCGHEE, *supra* note 16, at 7.

such districts with respect to the criterion of ensuring similar opportunity for minority voters as other voters have.

Regardless of how the EAC sets the opportunity range, House Bill 1 should specify that

the creation of minority opportunity districts for the purpose of ensuring minority groups have a similar chance as other groups to elect candidates of choice should be given at least as high a weight as other state criteria that are optional under federal law, such as compactness or minimizing jurisdiction splits. However, in no case should the weight given to the criterion of creating opportunity districts be higher than the combined weight given to other criteria.

5. Congress's Enforcement Powers Under the Reconstruction Amendments:
How Opportunity as Competitiveness
Reconciles the Court's and Congress's Views

Readers may understandably be wondering for some of these amendments: Are the changes constitutional? The answer is yes. First, it is acceptable for Congress to eliminate the 50% cutoff in *Gingles* because, as explained in Part I, the cutoff simply ignores that minority communities can form coalitions with other groups and, therefore, districts with well below 50% of voters belonging to the minority can still be “opportunity” districts. Second, as described in Section I.E, a great deal of the motivation for interpreting section 2 of the VRA so narrowly has been the institutional capacity and appropriateness of federal courts overseeing districting.¹⁷⁸ But redistricting commissions are not courts, and they are not federal entities. They should therefore receive more leeway under the Constitution. Third, as described in Sections I.A–C, it is constitutionally permissible for Congress to ask mapmakers to actively promote minority opportunity because the statute provides for that goal to be balanced with another districting criterion: the map must be reasonably fair on partisan grounds, with the method for determining that set by the EAC. Moreover, the weight given to the criterion of creating opportunity districts cannot be too high—it cannot subordinate other legitimate districting principles.

Finally, the specific definition I propose for “equal opportunity to elect preferred candidates,” as well as the method of defining “opportunity ranges” that I propose, takes account of the Court’s cautionary note that section 2 ensures equal opportunity, not a “feast.”¹⁷⁹ As a result, my definition of

178. See Elmendorf & Spencer, *supra* note 56, at 2152–53 (attempting to ameliorate this problem with proposed bright-line rules).

179. *Bartlett v. Strickland*, 556 U.S. 1, 15–16 (rejecting “the proposition . . . that section 2 entitles minority groups to the maximum possible voting strength”).

opportunity, which is tied to typical competitiveness of districts, ensures that this section of the VRA remains within Congress's enforcement powers under the Reconstruction Amendments and probably increases the odds that section 2 will be upheld by the federal courts in the long run.

Observers have become rightly concerned, after the Court found section 5 of the VRA to be beyond Congress's powers in *Shelby County v. Holder*,¹⁸⁰ that the courts might soon find section 2, as well, to go beyond those powers.¹⁸¹ Indeed, the Court may be interpreting section 2 narrowly in part because it wishes to avoid questions of the section's legitimacy as an exercise of Congress's enforcement powers under the Reconstruction Amendments.¹⁸² The reason the Supreme Court may view section 2 as illegitimate is that the Court has promoted, for the past three decades at least, an anticlassification view of the Equal Protection Clause, in which the elimination of formal racial advantages and disadvantages is the goal. But Congress, in section 2, was promoting an antisubordination view of the Equal Protection Clause, in which the elimination of structural, social, and historical racial disadvantage is the goal.¹⁸³ In the past, when these goals have come into conflict, the Court has sometimes, but not always, found Congress to be exceeding its Reconstruction enforcement powers. Facially neutral methods of achieving antisubordination goals have fared particularly well.¹⁸⁴

My proposed definition of equal opportunity finds a way to satisfy both values, at least in this context. Equal opportunity means that minority communities get the same numerical level of competitiveness as majority communities. Thus, anticlassification is satisfied: no person or racial group is getting bonus points on the basis of race, even though the policy is race-conscious.

At the same time, when drawing election districts, attention is paid at the structural level to minority opportunity in politics by aiming for the creation of *more* of this equal level of opportunity. More districts in the opportunity range—that typical level of competitiveness—is a criterion that mapmakers can and must seek to achieve. In other words, mapmakers can and must strive hard

180. 570 U.S. 529 (2013).

181. *Id.* at 549–50, 555–57; see Luis Fuentes-Rohwer, *The Future of Section 2 of the Voting Rights Act in the Hands of a Conservative Court*, 5 DUKE J. CONST. L. & PUB. POL'Y 125, 126–27 (2010); Zachary Roth, *Conservatives Prepare To Finish Off Voting Rights Act*, MSNBC (Jan. 9, 2014), <http://www.msnbc.com/msnbc/conservatives-prepare-finish-voting-ri> [https://perma.cc/2YZ4-R5NM].

182. Fuentes-Rohwer, *supra* note 181, at 127–29.

183. See Guinier, *supra* note 30, at 1590; Siegel, *supra* note 20, at 1472–73.

184. Compare *Nev. Dep't of Human Res. v. Hibbs*, 538 U.S. 721, 738–40 (2003) (holding facially gender-neutral dependent care and sick leave provisions of Family Medical Leave Act to be within Congress's enforcement powers), with *Bd. of Trs. of the Univ. of Ala. v. Garrett*, 531 U.S. 356, 360–61, 374 (2001) (holding accommodation provisions of the Americans with Disabilities Act to go beyond Congress's enforcement powers).

to help minority communities. But more help does not mean more advantage because opportunity is defined as *typical* competitiveness. Minority racial groups will get extra attention but equal opportunity. No legislator representing a district that is properly competitive, as opposed to a district in which minority voters are heavily overpacked, would think that “his primary obligation is to represent only the members of a particular racial group.”¹⁸⁵ In other contexts, it may be difficult to reconcile these competing views of what equal protection means, but in redistricting, we now have the tools.

CONCLUSION

Americans want fair electoral maps. Carrying this out effectively means more than forming nonpartisan commissions subject to the same confusing and competing legal rules that partisan mapmakers are subject to. The fairest nonpartisan would find it difficult to navigate (a) section 2 of the Voting Rights Act as interpreted in *Gingles* and *Strickland*; (b) the Equal Protection Clause; (c) the demands of a variety of interest groups; and (d) the demands of partisan interests posing as nonpartisan commenters. But inspired by recent litigation and attention to the problem of *partisan* gerrymandering, mathematicians have made advancements that could, if leveraged correctly, make real the promise of *racially* fair maps. If Congress seizes the moment, perhaps this math can do the seemingly impossible—satisfy both Congress’s antistatutory and the courts’ anticlassification concerns, and bring truly equal opportunity to our democratic system.

185. *Bethune-Hill v. Va. State Bd. of Elections*, 137 S. Ct. 788, 797 (2017) (describing this as one of the harms of racial classification in redistricting).

