

EQUAL VOTING WEIGHT OF ALL: FINALLY “ONE PERSON, ONE VOTE” FROM HAWAII TO MAINE?

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The “one person, one vote” rule requires districts within states to have precisely equal populations. Nevertheless, the populations of districts differ from state to state, varying from under 500,000 to over 900,000 people. The cause lies in the so-called method of apportionment. Throughout history, Congress has employed several different methods, but all have failed to allocate to states their exact and fair share of representation. This Article challenges this systemic distortion of the “one person, one vote” principle by inviting readers to consider a weighted-voting model that distributes the states’ power in the House of Representatives exactly “according to their Numbers.” The application of this model would result in an exact mathematical equality of each vote’s weight regardless of the voter’s state of residence. The Article also suggests why the courts may even find the model to be a constitutional imperative.

TABLE OF CONTENTS

INTRODUCTION..... 124

I. TWO CENTURIES OF APPORTIONMENT DISPUTE: FROM HAMILTON VERSUS JEFFERSON TO WEBSTER VERSUS HILL 127

 A. *Jefferson Versus Hamilton*..... 129

 B. *Alabama Paradox: Defects of Hamilton’s Method* 131

 C. *Webster Versus Hill* 133

II. ABUNDANCE WITHOUT ACCURACY: AN EXAMINATION OF FIVE OF THE “BEST” METHODS 136

 A. *Method of Hamilton* 137

 B. *Method of Jefferson*..... 138

 C. *Method of Dean* 140

 D. *Method of Webster*..... 140

 E. *Method of Hill*..... 141

 F. *No “Best” Method?* 141

III. THE ONE-PERSON-ONE-VOTE MODEL OF REPRESENTATION 142

 A. *Finally, Votes of Equal Weight* 145

 B. *What About the Equality of Representatives?* 149

 C. *Weighted Voting at the State and Local Level*..... 151

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IV. THE CONSTITUTION: “EQUAL PEOPLE” OR “EQUAL REPRESENTATIVES”?	158
A. <i>Is the Currently Used Model Unconstitutional?</i>	158
B. <i>The “Political Question Doctrine” and Justiciability</i>	159
C. <i>Which Standard of Review? Which Level of Scrutiny?</i>	160
D. <i>Equal Voting Weight Cases and the Strictness of the Review</i>	161
E. <i>Seat-Allocation and Census Cases: The Montana Standard</i>	163
F. <i>Whichever Standard, Same Result</i>	169
CONCLUSIONS	173

[T]he Constitution prescribes no particular process by which this apportionment is to be wrought out. It has plainly described the end to be accomplished, namely, the nearest approach to relative equality of representation among the States . . . [W]hether this end be attained best by one process or by another, becomes, when each process has been carried through, not matter of opinion, but matter of mathematical certainty.¹

INTRODUCTION

The population and popular voting strength of Iowa is only 2.77% greater than that of Mississippi.² Iowa’s congressional decision-making power, however, based on its apportioned representation, is twenty-five percent greater.³ Rhode Island has a 15.94% greater population than Montana, but 100% more representation in Congress.⁴ There is one representative for every 524,831 Rhode Islanders while one representative represents 905,316 Montanans—a seventy-two percent disparity in the voting weights enjoyed by the voters of these states.⁵ Representatives of 48.77% of the total U.S. population can hold a clear majority in the House of Representatives and can block passage of any decision supported by representatives of the popular majority.⁶ Is this as close as

1. 6 DANIEL WEBSTER, THE WRITINGS AND SPEECHES OF DANIEL WEBSTER 109 (1903).

2. According to the 2000 census, Iowa has a population of 2,931,923 and Mississippi’s population is 2,852,927. U.S. CENSUS BUREAU, APPORTIONMENT POPULATION AND NUMBER OF REPRESENTATIVES, BY STATE: CENSUS 2000, tbl.1 (2000), <http://www.census.gov/population/cen2000/tab01.pdf>.

3. Iowa holds five House seats, while Mississippi holds only four. *Id.*

4. Rhode Island has a population of 1,049,662 and holds two House seats, while Montana has a population of 905,316 and holds only one seat. *Id.*

5. *Id.* An even larger difference of 82.78% exists between Wyoming and Montana. Wyoming has a population of 495,304 and Montana’s population is 905,316. *Id.* Nevertheless, Wyoming is the least populated state in the Union and holds a seat regardless of its population. *See* U.S. CONST. art. I, § 2, cl. 3 (“[E]ach State shall have at Least one Representative . . .”). *See also infra* note 97 for more information on the interpretation of voting disparities.

6. The population of California, Florida, Ohio, Georgia, North Carolina, Massachusetts, Tennessee, Missouri, Arizona, Minnesota, Louisiana, Alabama, Colorado, Iowa, New Mexico, West Virginia, Nebraska, Maine, New Hampshire, Hawaii, Rhode Island, North Dakota, Alaska, Vermont, and Wyoming, and any five of Virginia’s districts, holds 218 House seats and represents 48.77% of the

we can get to the “one person, one vote” ideal?

Commentators have said and written much about the “one person, one vote” principle in the intrastate redistricting process. Commentators generally support it but often argue against its extreme application.⁷ The Supreme Court has decided to apply it strictly and requires that “as nearly as . . . practicable one man’s vote in a congressional election is to be worth as much as another’s”⁸ and that “a good-faith effort to achieve precise mathematical equality”⁹ be made. In the case of congressional districts, a court has struck down a population discrepancy of as little as nineteen people following the Court’s precedent.¹⁰

On the other hand, the very real discrepancies in voting weight between voters of different states have not attracted much academic attention recently. Lively debate on fair representation of states continued into the 1940s,¹¹ but, since that time, commentators have concluded that without constitutional amendments nothing can be done to equalize the voting weight of different states’ voters.¹² The discussions that followed the publication of Michel L. Balinski and H. Peyton Young’s book *Fair Representation* in 1982¹³ introduced little more than variations¹⁴ on already-familiar methods of representation

total U.S. population. See *infra* Table 1 for each state’s portion of total U.S. representation and U.S. CENSUS BUREAU, *supra* note 2, tbl.1 for the number of representatives per state.

7. See, e.g., RICHARD L. HASEN, *THE SUPREME COURT AND ELECTION LAW: JUDGING EQUALITY FROM BAKER V. CARR TO BUSH V. GORE* 73-86 (2003) (arguing that Supreme Court should protect only core of political-equality principle); Heather K. Gerken, *The Costs and Causes of Minimalism in Voting Cases: Baker v. Carr and Its Progeny*, 80 N.C. L. REV. 1411, 1427-43 (2002) (criticizing Court’s minimalist strategy in voting cases); Note, *A New Map: Partisan Gerrymandering as a Federalism Injury*, 117 HARV. L. REV. 1196, 1205 (2004) (criticizing “[Supreme] Court’s almost singular focus on the quantitative dimension of equality in redistricting cases” and neglect for qualitative aspect).

8. *Wesberry v. Sanders*, 376 U.S. 1, 7-8 (1964).

9. *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969).

10. *Vieth v. Pennsylvania*, 195 F. Supp. 2d 672, 674, 679 (M.D. Pa. 2002), *appeal dismissed*, *Jubelirer v. Vieth*, 537 U.S. 801 (2002), and *Schweiker v. Vieth*, 537 U.S. 801 (2002).

11. Although the centuries-old discussion of states’ representation and seat allocation and the discussion of equal voting weight of the individual voters that has taken place since the 1960s are thought of as different issues, they are in fact highly related, particularly with respect to their common objective. While the object of the former is to achieve equal representation for the average voter of each state, the latter focuses on the equal representation of each individual voter after the seat allocation and redistricting has been made. The outcome of the search for equal voting weight for the individual voter is therefore highly dependent on the allocation of seats among the states.

12. See, e.g., *Proposals for Electoral College Reform: Hearing on H.R. J. Res. 28 and H.R. J. Res. 43 Before the H. Subcomm. on the Constitution of the H. Comm on the Judiciary*, 105th Cong. 25-28 (1997) (statement of Becky Cain, President, League of Women Voters), http://commdocs.house.gov/committees/judiciary/hju57219.000/hju57219_0.HTM#25 (supporting proposal to abolish electoral college and create greater balance in voter representation).

13. Discussion reemerged with the publication of Balinski and Young’s book, which provided a thorough overview of the apportionment formulas’ history and research. MICHEL L. BALINSKI & H. PEYTON YOUNG, *FAIR REPRESENTATION: MEETING THE IDEAL OF ONE MAN, ONE VOTE* 10-66 (2d ed. 2001).

14. Actually, in 1974, Balinski and Young developed their own method but later decided they could not support a method that produced paradoxical results. Compare M. L. Balinski & H. P.

apportionment.¹⁵ Mathematicians, statisticians, political scientists, and legal scholars gave up and some even “proved” that the equality of voting weight between the voters in different states could not be achieved.¹⁶ This Article challenges such abnegation and seeks to establish that it is indeed possible to achieve equal voting weight for all voters when electing members to the House, regardless of voters’ states of residence, without change to the Constitution, election law, or district boundaries.

Part I will examine the Federal Constitution’s Apportionment Clause, the methods employed over the past two centuries to apportion seats among the states, and the constitutional and mathematical limitations that have prevented the full implementation of the equally weighted vote principle. In Part II, this Article reviews work undertaken to date by researchers and commentators who have attempted to determine which method most closely approaches the ideal.

Part III introduces a simple model of purely proportional distribution of power among the states and perfectly equal representation as well as voting weight of the people, regardless of the state of residence. While previous models have attempted to squeeze voter groups of different sizes into the unitary representation of an individual who has one vote in the legislature, the proposed model allows the ratios between representatives in the legislature to reflect the ratios between the voter groups they represent. In the U.S. House of Representatives, for example, the ratios between various states’ populations are transformed into whole numbers that total 435 representatives. In the proposed model, the total number of representatives in the House would remain the same, but each member of the House, instead of having one vote, would have the number of votes in the House that corresponds to the number of voters that member represents. In other words, the representative from Montana, representing 0.32% of the total U.S. population, would have 0.32% of voting power in the House of Representatives and not 0.23%, as is now the case.¹⁷ Meanwhile, *within* the states, mathematically exactly equal representation would also be achieved by allowing the representatives from larger districts to have proportionally more votes than their colleagues from smaller districts. Such a “weighted voting” system would allow us to draw districts with larger and

Young, *A New Method for Congressional Apportionment*, 71 PROC. NAT. ACAD. SCI. U.S. 4602, 4604-06 (1974) (suggesting new method of apportionment), with BALINSKI & YOUNG, *supra* note 13, at 36-45, 84-86 (2d ed. Brookings Inst. Press 2001) (1982) (concluding that Webster method is preferable as it is not subject to so-called “population paradox”).

15. The major and correct finding of Balinski and Young is that the presently used method, that of Hill, is biased in favor of small states, while Webster’s method is not biased either in favor of large or small states. BALINSKI & YOUNG, *supra* note 13, at 77. It was earlier believed that Hill’s was the unbiased method. See, e.g., Zechariah Chafee, Jr., *Congressional Reapportionment*, 42 HARV. L. REV. 1015, 1041 (1929) (declaring that Hill’s Method of Equal Proportions has “no bias in favor of either the larger or smaller states”). Neither of the methods, unfortunately, decreases the major voting weight discrepancies.

16. See, e.g., BALINSKI & YOUNG, *supra* note 13, at 95-156 (discussing various mathematical approaches to apportionment theory designed to illustrate impossibility of achieving equal voting weight among citizens of different states).

17. U.S. CENSUS BUREAU, *supra* note 2, tbl.1.

smaller populations that still give equal weight to all election votes. And by eliminating the need to draw weirdly shaped districts in an effort to achieve this equal voting weight, other redistricting standards such as compactness or respect for political subdivisions could be observed, thereby reducing the opportunities for gerrymandering. This part of the Article also evaluates the constitutionality of the proposed model and finds it fully constitutional.

The final part of this Article evaluates the proposed model's impact on the constitutionality of the presently used model. It reviews the past Supreme Court decisions on equal voting weight and apportionment issues. Because the Court uses strict scrutiny in redistricting cases and a less strict standard of review in the apportionment method cases, this Article examines the possible application of both of these standards to a challenge to the presently used representation model's constitutionality. It concludes that the presentation of the representation model described in this Article might well result in the current model of voting weight distribution being found unconstitutional under either of these standards. Finally, this Article attempts to predict the consequences of the introduction of the proposed model.

Because, as things now stand, the principal obstacle to voting weight equality is embedded in the apportionment process rather than in the interstate redistricting process, the Article focuses primarily on the history of attempts—and possible future ways—to overcome this obstacle. This Article's intention is to demonstrate that a perfectly equal voting weight is achievable. Whether the implementation of a weighted-voting model is practicable or even desired is not within its compass.

I. TWO CENTURIES OF APPORTIONMENT DISPUTE: FROM HAMILTON VERSUS JEFFERSON TO WEBSTER VERSUS HILL

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, *according to their respective Numbers* The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative¹⁸

The intent of the Constitution seems clear. Representation and taxation shall be apportioned according to the respective populations of the states, that is, proportionally. While taxes may be so apportioned, as money is divisible to the exact penny, congressmen cannot be cut up.¹⁹

A reading of the Constitutional Convention debates shows that “[t]he complexities of the problem of equal apportionment were not realized by the framers of the Constitution.”²⁰ Once the first census was taken in 1790 “and

18. U.S. CONST. art. I, § 2, cl. 3 (emphasis added).

19. BALINSKI & YOUNG, *supra* note 13, at 5; Chafee, *supra* note 15, at 1021.

20. Chafee, *supra* note 15, at 1020. According to Chafee, “[t]he only references to fractions [in

Congress tried to redistribute seats in the House, it had immediate difficulty.”²¹ “It was evident that each state must be given either too many or too few representatives, and never the exact number required by the Constitution.”²² When each state had received a certain number of seats according to the “one for every thirty Thousand”²³ measure of the population and some part of the population was left over, a dispute arose about what to do with those remainders.²⁴ Common sense directed that remainders be dropped—but should, for example, they be rounded up or down to the nearest whole number of representatives? The results of the two methods are not the same at all. For centuries, mathematicians have attempted to develop a method which would be “the fairest” or “the most proportional,” but this search for an optimal method has been largely unsuccessful. Over the past two centuries, Congress has used at least²⁵ four different methods, and several others were proposed. Each method has produced quite different results. It is well understood what ideal apportionment should look like, but none of the present methods achieves it. There is not even agreement on which method is the closest to the ideal.²⁶ Consequently, the enactment of virtually all of the methods, including the present one, has been determined by political considerations,²⁷ with the majority’s interests overriding those of the minority. These opposing camps have not only been the political parties but have also been the agricultural versus industrial interest groups, large versus small states, and even the North versus the South.²⁸

the Constitutional Convention debates records] are casual and indicate that they were disregarded.” *Id.* at 1020 n.16 (citing MAX FARRAND, RECORDS OF THE FEDERAL CONVENTION 634 (1911)).

21. *Id.* at 1020.

22. *Id.* at 1021.

23. U.S. CONST. art. I, § 2, cl. 3.

24. Chafee, *supra* note 15, at 1020-21.

25. Between 1850 and 1910, law required apportionment by Hamilton’s method, but it was never strictly observed. U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 451 & n.22 (1992) (citing MICHEL L. BALINSKI & H. PEYTON YOUNG, FAIR REPRESENTATION: MEETING THE IDEAL OF ONE MAN, ONE VOTE 37 (1982)). For political and mathematical reasons (Hamilton’s method resulted in the so-called “Alabama paradox”), different modifications of the method were used. See Paul H. Edelman & Suzanna Sherry, *Pick a Number, Any Number: State Representation in Congress After the 2000 Census*, 90 CAL. L. REV. 211, 214-15 (2002) (discussing use of “Vinton’s Hamiltonian method”); see also BALINSKI & YOUNG, *supra* note 13, at 36-45 (comparing application of various methods); Chafee, *supra* note 15, at 1025-27 (discussing application of Vinton’s method). Between 1790 and 1840, Jefferson’s method was used, but representation was manipulated by choosing the proper divisor and total number of House seats. See, e.g., BALINSKI & YOUNG, *supra* note 13, at 25 (noting James K. Polk’s manipulation of Jefferson’s method).

26. See, e.g., BALINSKI & YOUNG, *supra* note 13, at 84-86 (favoring Webster’s method over other methods); Chafee, *supra* note 15, at 1047 (favoring Hill’s method); Book Note, 82 MICH. L. REV. 1028, 1032 (1984) (reviewing BALINSKI & YOUNG, *supra* note 25) (suggesting that “Congress would do well to take note” of proposal made by Balinski and Young).

27. For the arguments about the proper apportionment method and the enactment of the present apportionment law, see *infra* notes 71-87 and accompanying text.

28. BALINSKI & YOUNG, *supra* note 13, at 13.

A. *Jefferson Versus Hamilton*

The dispute following the first census arose between Jeffersonian Republicans and Hamilton's Federalists.²⁹ Both Thomas Jefferson and Alexander Hamilton proposed their own formulas of apportionment.³⁰ After a bill adopting Hamilton's method was passed by Congress,³¹ Jefferson persuaded George Washington to use the first presidential veto against it.³² Then, Jefferson's method was instituted, but, before its adoption, it was obvious that it was systematically biased in favor of the larger states.³³ By the 1820s, this bias had started to upset the smaller states more and more.³⁴ In the five censuses from 1790 to 1830, Delaware's *ideal* shares of the House were 1.61, 1.78, 1.95, 1.68, and 1.52 seats, respectively.³⁵ Delaware's total share for this period should have been 8.54 seats; in fact it received only six seats.³⁶ New York, on the other hand, obtained forty seats when its ideal share was 38.59 according to the 1830 census³⁷ and had a five-census total of 128 seats with an ideal of only 123.58.³⁸ In 1822, Representative William Lowndes of South Carolina proposed his own method, which strongly favored small states but did not receive serious consideration.³⁹

29. Historical developments of the methods and events surrounding their enactment are exhaustively presented at *id.* at 10-59. For a shorter overview of the historical course of events surrounding the apportionment, see *Montana*, 503 U.S. at 448-56. *See also* Chafee, *supra* note 15, at 1020-21 (noting apportionment difficulties arising after census of 1790); Edelman & Sherry, *supra* note 25, at 213 (contrasting Hamilton and Jefferson methods); Book Note, *supra* note 26, at 1028 (noting that first apportionment debates arose between Republicans and Federalists).

30. Edelman & Sherry, *supra* note 25, at 213 (contrasting Hamilton's and Jefferson's apportionment proposals).

31. 3 ANNALS OF CONG. 540 (1792).

32. *See* Opinion on the Bill Apportioning Representation (Apr. 4, 1792), in 5 THE WRITINGS OF THOMAS JEFFERSON 493, 501 (Paul Leicester Ford ed., New York, Knickerbocker Press 1895) (suggesting that Hamilton apportionment bill was one on which "the President ought to interpose his negative"); Veto Message to the House of Representatives (Apr. 5, 1792), in 32 THE WRITINGS OF GEORGE WASHINGTON FROM THE ORIGINAL MANUSCRIPT SOURCES 1745-1799, at 16-17 (John C. Fitzpatrick ed., 1939) (rejecting "Act for an apportionment of Representatives among the several States according to the first enumeration"); 3 ANNALS OF CONG. 539 (1792) (same); *see also Montana*, 503 U.S. at 449 n.17 (providing text of Washington's veto message); BALINSKI & YOUNG, *supra* note 13, at 20-21 (discussing Washington's use of presidential veto).

33. Fear of bias is visible from the speech of Representative Theodore Sedgwick of Massachusetts, who warned of the bias as early as December 13, 1791. BALINSKI & YOUNG, *supra* note 13, at 13 (quoting 3 ANNALS OF CONG. (1849)). It is not insignificant that both Jefferson and Washington were from Virginia, and, at the time Jefferson proposed his method, Virginia was by far "the most populous state in the union." Efton Park, *The Mathematics of Apportionment*, 7 U. CHI. L. SCH. ROUNDTABLE 227, 231 n.6 (2000). On the bias of the Jefferson method, see BALINSKI & YOUNG, *supra* note 13, at 23, 33-35. On the results of the 1791 census, see *id.* at 11.

34. BALINSKI & YOUNG, *supra* note 13, at 25-27 (discussing New England states' dissatisfaction with existing apportionment scheme).

35. *Id.* at 23.

36. *Id.*

37. *Id.* This happened after the 1830 census. *Id.*

38. BALINSKI & YOUNG, *supra* note 13, at 23.

39. *Id.* at 23-25.

After the 1830 census, the debate over the apportionment method became extremely lively and a number of different methods, quotas, divisors, and House seat totals were discussed in Congress.⁴⁰ On one day of congressional debate alone, as many as ten different divisor proposals were discussed in the House, each one “harbor[ing] its own political cunning.”⁴¹ During this time New England’s population share declined drastically⁴² and its political leaders naturally searched for the apportionment formula that would strengthen New England’s representation.⁴³ After a “sleepless night,”⁴⁴ John Quincy Adams developed a “just” method that gave New England three seats more than it would have received under the bill that was in congressional procedure at the time.⁴⁵ Naturally, the method did not seem attractive to the large states’ representatives, and it was not seriously considered.⁴⁶

Nevertheless, in 1832, Adams sent his proposal to Daniel Webster and, at about the same time, Webster received another proposal for a completely new method from a Professor James Dean.⁴⁷ As a result, Webster undertook to research the issue.⁴⁸ He attacked Jefferson’s method and was the first one who stressed that the method adopted must originate from the intent of the Constitution.⁴⁹ He developed his own method, according to which all the fractions would be simply rounded up or down to the nearest whole number.⁵⁰ He gave this often cited interpretation of the Constitution’s Apportionment Clause:

“The end aimed at is, that representation and taxation should go hand in hand. . . . But between the apportionment of Representatives and the apportionment of taxes, there necessarily exists one essential

40. *See id.* at 23-33 (discussing various apportionment proposals).

41. *Id.* at 25. Similarly, in one day during the 1842 apportionment discussion, there were as many as fifty-nine different motions in the House on the apportionment divisor. *Id.* at 34.

42. Between 1790 and 1830, New England’s total representative population went down from 25.7% to 15.2%, and Massachusetts’s total representative population declined from 13.1% to 5.1%. BALINSKI & YOUNG, *supra* note 13, at 26.

43. *Id.* at 26.

44. *Id.* (quoting John Quincy Adams). In his memoirs, Adams recalled his sleepless night: “I passed an entirely sleepless night. The iniquity of the Apportionment bill, and the disreputable means by which so partial and unjust a distribution of the representation had been effected, agitated me so that I could not close my eyes. I was all night meditating in search of some device, if it were possible, to avert the heavy blow from the State of Massachusetts and from New England.”

Id. at 26 (quoting 8 JOHN QUINCY ADAMS, MEMOIRS OF JOHN QUINCY ADAMS 471-72 (Charles Francis Adams ed., Philadelphia, J.B. Lippinott & Co. 1876)).

45. *Id.* at 28 (defining “Method of John Quincy Adams”).

46. BALINSKI & YOUNG, *supra* note 13, at 27-28 (noting that Adams’s method favors small states relative to Jeffersonian method and was submitted “too late to do anything in the House”).

47. *Id.* at 28-29.

48. *See id.* at 32 (discussing how Webster researched past precedent for guidance on formulating his own apportionment method).

49. *Id.* at 30 (noting that Webster “lifted what had been a minor political squabble into a grave constitutional issue”).

50. *Id.* at 32.

difference. . . . (The) apportionment of taxes is capable of being made so exact, that the inequality becomes minute and invisible. But representation cannot be thus divided. . . . It is quite obvious, therefore, that the apportionment of representative power can never be precise and perfect. . . .

The Constitution, therefore, must be understood, not as enjoining an absolute relative equality, because that would be demanding an impossibility, but as requiring of Congress to make the apportionment of Representatives among the several States according to their respective numbers, *as near as may be*. That which cannot be done perfectly must be done in a manner as near perfection as can be. . . .

(The) Constitution prescribes no particular process by which this apportionment is to be wrought out. It has plainly described the end to be accomplished, namely, the nearest approach to relative equality of representation among the States. . . .

(Whether) this end be attained best by one process or another, becomes, when each process has been carried through, not matter of opinion, but matter of mathematical certainty.”⁵¹

In 1842, Congress abandoned Jefferson’s method and adopted Webster’s method, though it was used only once.⁵² Both methods were criticized because they “left the size of the House undetermined until the whole calculation had been completed.”⁵³ With the population of the country growing rapidly, it was inconvenient not to know how big the House would be after the next apportionment.

B. *Alabama Paradox: Defects of Hamilton’s Method*

Up to this time, all apportionment acts were intended for application to a single census.⁵⁴ In 1850, Congress pondered a “permanent” apportionment act *before* the census results were reported in order “to prevent [a] wrangle between South and North.”⁵⁵ The act, passed that year, adopted nothing but Hamilton’s

51. BALINSKI & YOUNG, *supra* note 13, at 30-31 (alteration in original) (quoting WEBSTER, *supra* note 1, at 107-09).

52. Act of June 25, 1842, ch. 46, 5 Stat. 491, 491. Chafee, who marks Webster’s method as “faulty,” calls it the “Method of 1840,” probably because it was used only once. Chafee, *supra* note 15, at 1022-23. He also notes some differences between the original Webster method and the one adopted in 1840. *Id.* at 1023.

53. Chafee, *supra* note 15, at 1024. Although the fact that the size of the House was undetermined seemed to be a huge problem at the time, it has been overcome easily in countries that still use these methods. Jefferson’s method is the most common method of distribution of seats among parties in national legislatures across Europe, where it is known as the d’Hondt method, and Scandinavian countries predominantly use Webster’s method under the name of Sainte-Laguë. See *infra* note 73 for a list of all the names used for various methods and *infra* note 114 for a discussion of the d’Hondt method.

54. See *U.S. Dep’t of Commerce v. Montana*, 503 U.S. 442, 451-52 & 452 n.25 (1992) (quoting Act of Nov. 15, 1941, ch. 470, 55 Stat. 761, 761-62 (codified as amended at 2 U.S.C. § 2a (2006))).

55. BALINSKI & YOUNG, *supra* note 13, at 37.

method, which Washington had vetoed six decades earlier.⁵⁶ This time it was sponsored by Representative Vinton.⁵⁷ Contrary to Jefferson's and Webster's schemes, under this method, the total number of seats was to be determined first, and then the seats were to be apportioned according to a prescribed formula.⁵⁸ Nevertheless, the method was never strictly observed.⁵⁹ It suffered, as Zechariah Chafee, Jr. said, "from a fatal defect called the 'Alabama paradox.'"⁶⁰ The paradox would arise when, over the decade, only one state expanded in population and all the others shrank, with the result that the state that expanded lost a seat.⁶¹ Several other methods produce the "Alabama paradox,"⁶² and commentators agree that any method capable of producing such a paradox should be rejected.⁶³ When law required the use of the Vinton-Hamilton method, the "Alabama paradox" was avoided by a further increase in the size of the House whenever it suited the majority party.⁶⁴ Even before Congress discovered the paradox, however, Congress did not follow the method.⁶⁵ It often

56. Act of May 23, 1850, ch.11, §§ 24-26, 9 Stat. 428, 432-33; BALINSKI & YOUNG, *supra* note 13, at 37.

57. *Montana*, 503 U.S. at 451. Hence it is sometimes called the Vinton or Hamilton/Vinton method. *See, e.g., id.* at 451 nn.22-23 (referring to Vinton's endorsement of Hamilton's prior approach as "Hamilton/Vinton method"); Chafee, *supra* note 15, at 1025 (discussing "Vinton Method" at length).

58. Chafee, *supra* note 15, at 1025.

59. BALINSKI & YOUNG, *supra* note 13, at 37.

60. Chafee, *supra* note 15, at 1026. In 1881, Alabama would have received 8 seats if the House total had been 299 but ultimately received only 7 seats in a House of 300. BALINSKI & YOUNG, *supra* note 13, at 38-39; Chafee, *supra* note 15, at 1026; Edelman & Sherry, *supra* note 25, at 214.

61. For practical examples, see Chafee, *supra* note 15, at 1026 n.32, and BALINSKI & YOUNG, *supra* note 13, at 39.

62. Among these methods are, especially, the Modified Vinton Rule, the method of Alternate Ratios, the method of Minimum Range, and the method of Minimum Inverse Range. For descriptions of all four methods, see Chafee, *supra* note 15, at 1026 n.33. *See also* E.V. Huntington, *The Apportionment of Representatives in Congress*, 30 TRANSACTIONS AM. MATHEMATICAL SOC'Y 85, 97-100 (1928) (discussing Alabama paradox resulting from Vinton method of 1850 and method of Alternate Ratios). Willcox suggested the Modified Vinton Rule and the method of Minimum Range, and Hill proposed the method of Alternate Ratios. Chafee, *supra* note 15, at 1026 n.33.

63. *See, e.g.,* BALINSKI & YOUNG, *supra* note 13, at 84 (opining that politically acceptable method must avoid Alabama paradox); Chafee, *supra* note 15, at 1026 (rejecting any method with potential to create Alabama paradox).

64. Chafee, *supra* note 15, at 1027 n.34. In 1900, Maine was a victim of the Alabama paradox. *Id.* at 1026 n.31. According to the Vinton method, the state would have four members in a House of 383, 384, or 385. *Id.* In a House of 386, it would have dropped to three, and, in a House of 387 or 388, it would have been four. *Id.* In a House of 389 or 390 representatives, Maine would have three members again, and, in a House of 391 representatives, it would have had four members again. *Id.* The census committee proposing the bill chose the total number of House seats, according to which Maine received only three seats. Chafee, *supra* note 15, at 1026 n.31. The same year, in a House of 357 or 358, Colorado received two members, yet, in either a smaller or larger House, Colorado received three members. *Id.*; *see also* *Hearings on H.R. 13471 Before the H. Comm. on the Census*, 69th Cong., 68 CONG. REC. 14, 85 (1926); BALINSKI & YOUNG, *supra* note 13, at 41-42 (quoting strong partisan debate in House over Maine seat).

65. BALINSKI & YOUNG, *supra* note 13, at 37-38. Adjustments for political and various other reasons were made from the time the Apportionment Act was enacted in 1850, while the Alabama

happened that several states were unhappy with the outcome of the apportionment, and Congress simply adjusted the size of the House to follow certain “principles.”⁶⁶ Of course, such adjustments depended heavily on the political orientation of those seeking additional seats.⁶⁷ Hence, between 1850 and 1911, representatives played with the numbers and adjusted the apportionment formulas and the total number of House seats.⁶⁸ The Hamilton formula was not once strictly observed.⁶⁹

C. *Webster Versus Hill*

The defects of the Hamilton method, the growth of the population, and the ease with which the total number of seats could be manipulated resulted in the fixing of the number of representatives at 435 and the adoption of the Webster method in 1911.⁷⁰ After the 1920 census, however, the debate over the reapportionment method heated up again, this time between proponents of Webster’s method and proponents of the newest idea, the Hill-Huntington method, also known as the method of Equal Proportions.⁷¹ Congress hired a National Academy of Sciences committee of experts to review the subject.⁷² The committee focused on five methods that could not produce the Alabama paradox. These methods included the methods of Jefferson, Adams, Dean, Webster, and Hill.⁷³ In its detailed report, the committee correctly concluded

paradox was discovered in 1881. *Id.* at 38-39. In 1850, California was given an extra seat because its population was “quickly climbing.” *Id.* at 37. In the 1860s, for example, “233 seats were first meted out in accordance with the [Hamilton] method, and then a pretext was found to give out 8 more seats—all of them to Northern states.” *Id.* Similarly, in the 1870s, just a few months after the original apportionment of 283 seats, nine additional seats were added without following any explainable principle. *Id.* Furthermore, if the Hamilton method had been followed in 1876, that would have resulted in a different composition of the Electoral College and in the election of Samuel J. Tilden as President. BALINSKI & YOUNG, *supra* note 13, at 37. Nevertheless, with a minority of the popular vote and with only a one-vote margin in the Electoral College, resulting from the above-mentioned modification in Hamilton’s method, Rutherford B. Hayes was elected President. *Id.*

66. *See id.* (discussing instance in which fixed apportionment changed to give California extra seat due to its booming population).

67. *See id.* (changing apportionment to favor, for example, Northern states or Republican party).

68. *See id.* at 37-38 (providing examples of how apportionment formulas and number of congressional seats became political tools).

69. BALINSKI & YOUNG, *supra* note 13, at 37; *see also* Edelman & Sherry, *supra* note 25, at 215 (describing failure of Hamilton’s method and Congress’s decision to calculate number of representatives for each state using Webster’s method).

70. *See* U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 451 (1992) (noting historical background, including dissatisfaction with Hamilton/Vinton method, Congress’s subsequent return to Webster method, and establishment of fixed number of House representatives).

71. *See* Chafee, *supra* note 15, at 1032 (attributing method to Huntington); Edelman & Sherry, *supra* note 25, at 215 (referring to “Hill’s method”).

72. *Montana*, 503 U.S. at 451.

73. *Id.* at 452 n.26. Actually, the committee used the following names: method of Greatest Divisors, method of Smallest Divisors, method of Harmonic Mean, method of Major Fractions, and method of Equal Proportions. *Id.* Each of the methods discussed in this Article is known under several different names. The method proposed by Jefferson is also known as Greatest Divisors, *id.* at 450,

that there is no “best” method among the five.⁷⁴ Each of them “could be described as the ‘best’ in the sense of minimizing the discrepancy between districts.”⁷⁵ All depended on the measure of discrepancy.⁷⁶ The Supreme Court summed up the committee’s conclusion in *United States Department of Commerce v. Montana*:⁷⁷

The method of the harmonic mean, for example, yielded the fairest apportionment if the discrepancy was measured by the absolute difference between the number of persons per Representative. The method of major fractions was the best method if the discrepancy was measured by the absolute difference between the number of Representatives per person (also known as each person’s “share” of a Representative). The method of equal proportions produced the fairest

d’Hondt’s, Hagenbach-Bischoff’s, Highest Averages, BALINSKI & YOUNG, *supra* note 13, at 92, and Rejected Fractions, Chafee, *supra* note 15, at 1022. The method proposed by Adams is known as Smallest Divisors. *Montana*, 503 U.S. at 450. The method proposed by Dean is known as the Harmonic Mean. *Id.* at 461. The method proposed by Webster is known as the method of 1840, Chafee, *supra* note 15, at 1023, Major Fractions, *Montana*, 503 U.S. at 451, Sainte-Laguë’s, and Odd Numbers, BALINSKI & YOUNG, *supra* note 13, at 92. The method proposed by Hill is known as the method of Equal Proportions, Geometric Mean, Huntington’s method, BALINSKI & YOUNG, *supra* note 13, at 157, or Hill-Huntington’s method, *Massachusetts v. Mosbacher*, 785 F. Supp. 230, 247 (D. Mass. 1992), *rev’d sub nom.*, *Franklin v. Massachusetts*, 505 U.S. 788 (1992). The method proposed by Hamilton is known as Vinton’s method, Hamilton-Vinton’s method, or Greatest Remainders. BALINSKI & YOUNG, *supra* note 13, at 157.

74. G.A. BLISS, E.W. BROWN, L.P. EISENHART & R. PEARL, REPORT TO THE PRESIDENT OF THE NATIONAL ACADEMY OF SCIENCES, in 70 CONG. REC. 4966, 4966-67 (Mar. 2, 1929).

75. *Montana*, 503 U.S. at 454. This conclusion and the issue of apportionment formulas in general dramatically demonstrate a lack of interdisciplinary and comparative research. Jefferson’s method of 1791 was reinvented in Europe in 1878, where it is known as the D’Hondt method. BALINSKI & YOUNG, *supra* note 13, at 92. Similarly, the 1791 Hamilton and 1832 Webster methods have been reinvented in Europe by Thomas Hare in 1857 and Sainte-Laguë in 1910, respectively—presumably without knowledge of the methods’ previous existence. *Id.* at 60; Josep M. Colomer, *The Strategy and History of Electoral System Choice*, in HANDBOOK OF ELECTORAL SYSTEM CHOICE 3, 43 (Josep M. Colomer ed., 2004). Moreover, not only were the methods reinvented but discussion about which method was fairest followed in Europe separately about a century later. European political science research in the 1990s came to a “surprising” conclusion identical to the 1929 conclusion of the National Academy of Sciences, which is characterized above by the Supreme Court. The reinvention of the methods, rediscussion about the “best” methods and the reconclusion—that the decision on the “best” method depends solely on the discrepancy measure—took place without a single citation of any of the congressional apportionment sources from 1790 to 1920. See BLISS, BROWN, EISENHART & PEARL, *supra* note 74, at 4966-67 (discussing different methods and concluding that there is no single standard of proportionality against which methods can be judged); Michael Gallagher, *Proportionality, Disproportionality and Electoral Systems*, 10 ELECTORAL STUD. 33, 33 (1991) (“Different PR methods should be seen not as being more proportional or less proportional than each other but as embodying different ideas as to what maximizing proportionality means Each of the main methods of PR (d’Hondt, Sainte-Laguë, largest remainders) generates its own index of proportionality and, thus, its own way of measuring disproportionality.”); see also Gary W. Cox & Matthew Soberg Shugart, *Comment on Gallagher’s ‘Proportionality, Disproportionality and Electoral Systems,’* 10 ELECTORAL STUD. 348, 350 (1991) (suggesting that debates focus on bias rather than disproportionality of apportionment method).

76. *Montana*, 503 U.S. at 454.

77. 503 U.S. 442 (1992).

apportionment if the discrepancy was measured by the “relative difference” in either the size of the district or the share of a Representative.⁷⁸

The committee ultimately recommended Hill’s method to Congress.⁷⁹ It minimized the relative difference in a share of the representative per person and, among the five studied methods, it “occupied an intermediate position in terms of favoring small States over large States.”⁸⁰ But the dispute did not end there. Congress, still divided, did not have to decide between Webster’s and Hill’s methods in the 1930s apportionment because both methods produced identical results.⁸¹ After the 1940 census, however, this was not the case. Hill and Webster gave identical allocations, except for one seat.⁸² Under Hill’s method, this seat would go to Arkansas, a safely Democratic state, and under Webster’s method it would go to Michigan, a predominantly Republican state.⁸³ When this discrepancy was discovered, a Democratic representative from Arkansas immediately proposed a bill adopting Hill’s method.⁸⁴ When Congress passed the bill, members of Congress clearly voted along party lines. With the exception of Democrats from Michigan, all Democrats voted for the bill, while all Republicans voted against it.⁸⁵ Because the bill adopting Hill’s method was prepared as “permanent,” it eliminated the need for Congress to choose a method after each census.⁸⁶ Hill’s method has been used since,⁸⁷ but, in the

78. *Montana*, 503 U.S. at 454-55 (footnotes omitted).

79. BLISS, BROWN, EISENHART & PEARL, *supra* note 74, at 4966-67.

80. *Montana*, 503 U.S. at 455. The same argument is made by Chafee, Chafee, *supra* note 15, at 1041, but it is false. If we chose five methods out of many, that does not mean that the one that occupies an intermediate position among these five as to a particular criterion would occupy this position among all the available methods. Further, even if a method occupied an intermediate position among all the methods, that would not prove it to be the most unbiased one.

81. See BALINSKI & YOUNG, *supra* note 13, at 57 (noting lack of dispute after census of 1930 because Webster and Hill methods produced same result); see also *id.* at 170-71 (listing 1930 allocations under both methods).

82. See *id.* at 57 (noting discrepancy between Hill and Webster methods).

83. *Id.* at 58.

84. The bill was proposed by Arkansas Representative Ezekiel C. Gathings. *Id.* at 58; see also Act of Nov. 15, 1941, Pub. L. No. 291, 55 Stat. 761 (codified as amended at 2 U.S.C. § 2a (2006)) (providing for apportioning representatives in Congress by equal proportions method).

85. BALINSKI & YOUNG, *supra* note 13, at 58.

86. 2 U.S.C. § 2a (2006). The provision provides that,

(a) On the first day, or within one week thereafter, of the first regular session of the Eighty-second Congress and of each fifth Congress thereafter, the President shall transmit to the Congress a statement showing the whole number of persons in each State, excluding Indians not taxed, as ascertained under the seventeenth and each subsequent decennial census of the population, and the number of Representatives to which each State would be entitled under an apportionment of the then existing number of Representatives by the method known as the method of equal proportions, no State to receive less than one Member.

(b) . . . It shall be the duty of the Clerk of the House of Representatives, within fifteen calendar days after the receipt of such statement, to send to the executive of each State a certificate of the number of Representatives to which such State is entitled under this section.

1980s, commentators started to speak strongly in favor of Webster's method.⁸⁸ After the 1990 census, the question of the "right" method came to the Supreme Court,⁸⁹ because Montana would not have lost a seat if the method proposed by James Dean had been used instead of Hill's method.⁹⁰ The Court ruled that it could not decide which of the two methods was closer to the ideal proportionality.⁹¹ Nevertheless, it set an important standard for apportionment disputes: if a plaintiff is able to prove that the method he proposes makes representation more equal than the current method, the current method should be declared unconstitutional.⁹²

II. ABUNDANCE WITHOUT ACCURACY: AN EXAMINATION OF FIVE OF THE "BEST" METHODS

Theoretically, there is an unlimited number of possible allocation methods.⁹³ Some are heavily biased toward a certain group of states and are thus inappropriate for seat allocation.⁹⁴ Others are theoretically unsound and prone

Id.

87. BALINSKI & YOUNG, *supra* note 13, at 58.

88. *See id.* at 74-75, 77-78, 105-06, 119-28 (criticizing Hill's method and supporting Webster's method); Park, *supra* note 33, at 231, 235-37 (commenting generally on weaknesses of Hill's method and strengths of Webster's method, and pointing out studies done by Balinski and Young to conclude that Webster's study is most fair).

89. *See* U.S. Dep't of Commerce v. Montana, 503 U.S. 442, 445 (1992) (considering issue of what standard "governs the apportionment of Representatives among the several States" after method of equal proportions was declared unconstitutional by federal district court in Montana).

90. *See id.* at 445, 455 (acknowledging cause of litigation as Montana's loss of one seat, which would not have occurred with "Dean method"). In 1991, Montana and Massachusetts filed separate lawsuits in federal court challenging the constitutionality of the current apportionment method. *Massachusetts v. Mosbacher*, 785 F. Supp. 230, 233 (D. Mass. 1992), *rev'd sub nom.* *Franklin v. Massachusetts*, 505 U.S. 788 (1992); *Montana v. U.S. Dep't of Commerce*, 775 F. Supp. 1358, 1369 (D. Mont. 1991), *rev'd*, 503 U.S. 442 (1992); Lawrence R. Ernst, *Apportionment Methods for the House of Representatives and the Court Challenges*, 40 MGMT. SCI. 1207, 1207 (1994). Montana proposed the Dean method, and Massachusetts, using different arguments, suggested the Webster method. *Mosbacher*, 785 F. Supp. at 253; *Montana*, 775 F. Supp. at 1364; Ernst, *supra*, at 1207. Separate three-judge panels adjudicated the two cases. *Mosbacher*, 785 F. Supp. at 236; *Montana*, 775 F. Supp. at 1360; Ernst, *supra*, at 1207. In a two-to-one vote, the *Montana* panel invalidated the Hill method as unconstitutional. *Montana*, 775 F. Supp. at 1366; Ernst, *supra*, at 1207. In contrast, the *Massachusetts* panel unanimously upheld the Hill method. *Mosbacher*, 785 F. Supp. at 253 (declining to "disturb the congressional choice"); Ernst, *supra*, at 1207. The *Montana* decision was appealed to the Supreme Court, and Massachusetts filed an amicus curiae brief in support of the Webster method. Ernst, *supra*, at 1207-08 (discussing *Montana* and *Massachusetts* cases in general, and specifically addressing mathematical and statistical issues in cases).

91. *Montana*, 503 U.S. at 463 ("In none of these alternative measures of inequality do we find a substantive principle of commanding constitutional significance.").

92. *See infra* Part IV.E for a detailed discussion of the *Montana* decision.

93. The first to realize the potentially unlimited number of methods for allocation seems to be Walter Willcox: "If time permitted I could prove that there are not only the five methods but as many as there are fractions between zero and one." BALINSKI & YOUNG, *supra* note 13, at 60 (quoting Walter Willcox).

94. *See infra* Part II.B for a discussion of Jefferson's method and its bias in favor of large states

to producing paradoxical results.⁹⁵ Some methods have been adopted and later abandoned due to defects discovered when actually put to a practical test.⁹⁶ About five of the methods do not have serious failings, or these failings occur extremely rarely, and it is debatable which of these five methods produces the fairest result. Yet even these “best five,” when applied to the House of Representatives, may produce voting weight discrepancies up to 100%.⁹⁷

Some methods have significantly shaped House apportionment history.⁹⁸ Governments have used the methods put forward by Hamilton, Jefferson, Webster, and Hill in the past or, in the case of Hill’s method, in the present. Jefferson’s method is the world’s most widely used proportional representation method. Webster’s method is important because commentators in the last two decades, especially Young and Balinski, have touted it as more proportional than Hill’s method and, accordingly, have strongly recommended it.⁹⁹ Webster’s method will likely replace Hill’s some time in the future. Dean’s method does not have any strong defects, frequently draws the attention of commentators, and received increased attention after the 1990 census, when dispute over the apportionment method led to the Supreme Court decision *United States Department of Commerce v. Montana*.¹⁰⁰

A. Method of Hamilton

Hamilton’s method is the oldest and one of the simplest allocation methods. The total U.S. population is divided by the number of seats to be apportioned, e.g., 435, to get the “quota,” that is, the number of voters represented by a single representative and equal to the size of the ideal district.¹⁰¹ The population of each state is divided by the “quota” and each state is assigned “a number of

and Parts II.C and II.E for a discussion of the bias toward small states found in Dean’s method and Hill’s method, respectively.

95. See *infra* Part II.A for a discussion of the Hamilton method paradoxes.

96. See *infra* Part II.D for a discussion of the impractical results stemming from application of Webster’s method.

97. See *infra* Parts II.A-E for a detailed discussion of each method. A voting-weight discrepancy of 100% occurs when two states have approximately equal populations, yet one of them receives one seat and the other one receives two. Any of the seat allocation methods is capable of producing such result. The “but each State shall have at Least one Representative” Clause of the U.S. Constitution, U.S. CONST. art. 1, § 2, can result in even larger discrepancies (although it does not with the current population figures), but this Article does not focus on these discrepancies. A clause allowing the smallest states to be overrepresented does not mean there should also be discrepancies between voters of other states. Cf. *Brown v. Thomson*, 462 U.S. 835, 846 (1983) (limiting challenge to constitutionality of one district’s discrepancy rather than attacking entire state’s apportionment plan).

98. For a detailed description of the methods, see BALINSKI & YOUNG, *supra* note 13, at 10-59.

99. *Id.* at 74-78, 105-06, 119-28 (concluding that Webster method is unbiased); *id.* at 83, 86 (arguing that Webster method is “preferred for federal systems”); *id.* at 91 (stating that Webster method is best for proportional representation systems).

100. 503 U.S. 442, 445 (1992).

101. Chafee uses term “ratio” rather than “quota.” Chafee, *supra* note 15, at 1025. Nevertheless, the term “quota” is used far more commonly. See, e.g., BALINSKI & YOUNG, *supra* note 13, at 17 (using “quota”).

representatives equal to the whole number in the quotient for that state.”¹⁰² This method treats states with a population smaller than the quota specially by giving them one representative.¹⁰³ The remaining seats belong to the states with the largest fractions.¹⁰⁴

While Hamilton’s method is the simplest method, it is also one of the most unsound, suffering as it does from the Alabama paradox.¹⁰⁵ It is also subject to two other paradoxes—the “population paradox” and the “new states paradox.”¹⁰⁶ Balinski and Young offer the clearest description of the population paradox:

As the populations of states shift relative to one another it is natural to expect that their apportionments will change accordingly. If in the period between two censuses some state A grows larger relative to state B, then it is absurd to suppose that state A would lose seats to state B. Yet this can happen with Hamilton’s method¹⁰⁷

The Hamilton method is considered one of the most defective methods¹⁰⁸ and, in all likelihood, will never be used again.

B. *Method of Jefferson*

Congress first employed Jefferson’s method to apportion seats among the states,¹⁰⁹ and it is, like Hamilton’s method, a simple one. Congress decided on a common divisor,¹¹⁰ and then divided each state’s population by this divisor.¹¹¹ The method then assigned each state a number of representatives equal to the

102. Chafee, *supra* note 15, at 1025.

103. *Id.*

104. BALINSKI & YOUNG, *supra* note 13, at 17; Edelman & Sherry, *supra* note 25, at 213.

105. *See* Chafee, *supra* note 15, at 1026-27 (rejecting it as unsound method that produces “Alabama paradox”).

106. BALINSKI & YOUNG, *supra* note 13, at 43-44.

107. *Id.* at 42. The “New States Paradox,” a phenomenon that occurred when a new state joined the Union and the number of total House seats was increased by the number of that state’s seats, affected the allocation of seats among the other states, although it should not have done so. *See id.* at 43-44 (demonstrating paradox through example of when Oklahoma became a state). This paradox no longer seems relevant because the number of seats has been fixed at 435 and the addition of a new state must be reflected in the allocation of all seats.

108. *See* Chafee, *supra* note 15, at 1025-27 (concluding method is “unsound, and should be discarded”).

109. *See* U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 449 (1992) (explaining history of adoption of Jefferson’s method as alternative to Washington’s veto of Hamilton’s method); BALINSKI & YOUNG, *supra* note 13, at 21 (describing House’s adoption of Jefferson’s apportionment bill).

110. Chafee uses the term “fixed ratio.” Chafee, *supra* note 15, at 1021. Nevertheless, some literature uses the term “divisor,” *see, e.g.*, BALINSKI & YOUNG, *supra* note 13, at 18 (using “divisor”), and other literature uses the term “quotient,” *see, e.g.*, ERIC OPPENHUIS, VOTING BEHAVIOR IN EUROPE: A COMPARATIVE ANALYSIS OF ELECTORAL PARTICIPATION AND PARTY CHOICE 150 (1995) (using “quotient” term); SIMON STERNE, ON REPRESENTATIVE GOVERNMENT AND PERSONAL REPRESENTATION 44, 104, 127 (Philadelphia, J.B. Lippincott & Co. 1871) (same); JACK STRAW, THE GOVERNANCE OF BRITAIN—REVIEW OF VOTING SYSTEMS: THE EXPERIENCE OF NEW VOTING SYSTEMS IN THE UNITED KINGDOM SINCE 1997, at 180 (2008) (same).

111. BALINSKI & YOUNG, *supra* note 13, at 18.

whole number of the divisors in the state's population, and states with a population below one divisor received one seat.¹¹² Jefferson's method simply disregarded fractions,¹¹³ but these rejected fractions produced several problems.

First, Congress did not know the final size of the House until the end of the apportionment.¹¹⁴ When the division resulted in too large or too small a number of representatives, another divisor was simply chosen and all the states' populations were divided by this new divisor.¹¹⁵ Because the total House size remained undetermined when Jefferson's method was in force, political groups of the time engaged in endless manipulations of the divisor and House size.¹¹⁶ The second problem with Jefferson's method was that the disregarded fractions resulted in a strong and systematic bias in favor of the largest states.¹¹⁷ Applying Jefferson's formula to the hypothetical case of two states, one with an ideal share of 1.45 seats and the other with an ideal share of 20.45 seats, the states would win one and twenty seats respectively. Although the two disregarded fractions seem of the same size, the disregarded fraction of the smaller state represents 31.0% of its ideal share and the disregarded fraction of the larger state represents only 2.2% percent of its ideal share.¹¹⁸ And in practice Jefferson's method was generous to the larger states, tending to give them more than their rounded-up quotas.¹¹⁹ According to the "staying within the quota" principle, "no state should get more than its quota rounded up nor less than its quota rounded down."¹²⁰ While many of the methods violate the quota principle, Jefferson's method violates it most frequently.¹²¹ Because of this extreme bias in favor of the largest

112. *Id.* at 18-19.

113. As the result of this effect, the name "Method of Rejected Fractions" emerged. Chafee, *supra* note 15, at 1021.

114. As said, this problem was solved by Belgian mathematician and law professor Victor D'Hondt, who "reinvented" the same allocation method in 1878. In addition to the above-described allocation method, he developed a different formula, which, together with a series of tables, also allows the allocation of seats in a body with a fixed number of seats. For more on the "D'Hondt method," now commonly used in Europe, see VICTOR D'HONDT, *LA REPRÉSENTATION PROPORTIONNELLE DES PARTIS PAR UN ÉLECTEUR* (Gand, 1878), and VICTOR D'HONDT, *SYSTÈME PRATIQUE ET RAISONNÉ DE REPRÉSENTATION PROPORTIONNELLE* (Bruxelles, Muquardt, 1882). On the wide use of this method in the world, see, for example, INT'L INST. FOR DEMOCRACY & ELECTORAL ASSISTANCE, *THE INTERNATIONAL IDEA HANDBOOK OF ELECTORAL SYSTEM DESIGN* 60-88, 139-45 (Andrew Reynolds & Ben Reilly eds., 1997).

115. See BALINSKI & YOUNG, *supra* note 13, at 19 (noting that use of smaller divisor when rounding down results in too few representatives).

116. See *id.* at 13, 21 (describing debate over number of representatives and political competition to determine method of apportionment).

117. *Id.* at 23; Edelman & Sherry, *supra* note 25, at 213.

118. See BALINSKI & YOUNG, *supra* note 13, at 13 (recognizing that unrepresented fractions impact smaller states more severely than larger states). For a more detailed account of the bias of Jefferson's method, see *id.* at 13, 23, 33-35, 42, 72-75, 77-78, 124, 126-28.

119. See *id.* at 23, 79 (describing how Delaware's apportionment was 8.54 but it received only six seats, while New York's ideal apportionment was 123.58 but it was allotted 128 seats, and observing that "Jefferson's method frequently gives large states more than their quotas rounded up").

120. *Id.* at 79.

121. *Id.* at 81. Jefferson's method virtually always violates the quota principle, while Webster's

states, Jefferson's method is unlikely to be used again for House seat allocation.

C. *Method of Dean*

Mathematician James Dean developed his method in 1832 as an answer to Jefferson's method,¹²² because Jefferson's method disregarded even very large fractions and rounded all the fractions down to the whole number. According to Dean's method, Congress would first determine the size of the ideal district and then give each state the number of seats that would produce the smallest population difference between that state's districts' average population and the ideal district's population.¹²³ According to his own explanation, "each State shall have such a number of representatives, that the population for each shall be nearest possible, whether over or under, to [the ideal district]."¹²⁴ Although this method may seem closest to perfection when measured against the criteria used by Dean, it fails when measured against other criteria. For example, other methods come much closer to the ideal when trying to ensure that every citizen's fractional share of a representative be as nearly equal as possible.¹²⁵ It also tends to systematically favor smaller states.¹²⁶

D. *Method of Webster*

Webster also developed his method in 1832, but he was arguably the first to derive a method of apportionment from the constitutional text while trying to effect the Apportionment Clause's directive "as near as may be."¹²⁷ He suggested simply rounding states' quotas (i.e., ideal number of seats) up or down to the nearest whole numbers.¹²⁸ Unfortunately, with the fixed total House size, this does not always work, since there may be more quotas ending with fractions above 0.5 than below, or more below than above.¹²⁹ If these fractions were rounded to the nearest whole number, the final number of seats allocated would not sum to 435 with too many or too few seats being allotted. A remedy exists in not rounding up or down at 0.5 but at a point that produces the desired seat

method, for example, violates it once per 1640 censuses and the method of Hill violates it once per 350 censuses. See BALINSKI & YOUNG, *supra* note 13, at 81-83 & tbl.10.3 (finding that Webster's method only violates quota principle once every 16,000 years and that Hill's method is five times more likely to violate quota principle than Webster's). See *supra* note 97 for a discussion of discrepancies among apportioned representatives of smaller states.

122. See BALINSKI & YOUNG, *supra* note 13, at 23, 29-30 (discussing how new proposals were made, including Dean's).

123. *Id.* at 30.

124. *Id.* at 29 (quoting WEBSTER, *supra* note 1, at 121 (extract of letter from Professor James Dean)).

125. See, for example, *id.* at 75 fig.9.1, for a comparison between five methods of apportionment that shows that the methods of Hill and Webster come much closer to the ideal.

126. See *id.* at 74 (noting that when states are divided into thirds by size Dean's method favors smallest third).

127. BALINSKI & YOUNG, *supra* note 13, at 30-31 (quoting WEBSTER, *supra* note 1, at 107-09).

128. Edelman & Sherry, *supra* note 25, at 214.

129. *Id.*

total.¹³⁰

E. Method of Hill

Joseph A. Hill, chief statistician of the Division of Revision and Results in the Bureau of Census, developed a method that tried to minimize the relative difference in representation between any two states.¹³¹ His Harvard classmate, Edward V. Huntington, then a professor of mathematics and mechanics at Harvard, published Hill's original idea under the new name "Method of Equal Proportions."¹³² Hill himself amended the original proposal and published it under the name of "method of alternate ratios,"¹³³ hence the method's name: Hill-Huntington.

According to this method, comparisons should be made between any two pairs of states, and representatives should be transferred from one state to another until such transfers do not minimize the relative difference in representation between any two states.¹³⁴ At the time of the adoption of Hill's method, many thought that Hill's method was the most unbiased one.¹³⁵ Later, however, studies proved that it tends to favor small states over large ones¹³⁶ and tends to violate the quota principle more often than other methods.¹³⁷

F. No "Best" Method?

Comparison of these methods shows that none is the absolute winner. The method proposed by Hamilton should be disregarded because it is theoretically unsound and prone to paradoxical results.¹³⁸ Jefferson's method is heavily biased in favor of the largest states.¹³⁹ Dean's method excessively favors small states.¹⁴⁰

130. *Id.*

131. BALINSKI & YOUNG, *supra* note 13, at 47-48.

132. Chafee, *supra* note 15, at 1032-35 (discussing Huntington's method); Edward V. Huntington, *A New Method of Apportionment of Representatives*, 17 Q. PUBLICATIONS AM. STAT. ASS'N 859, 862 n.* (1921) (crediting Hill for first proposing and advocating method); Huntington, *supra* note 62, at 89 n.* (crediting Hill for proposed method). On the development of the Hill-Huntington method, see BALINSKI & YOUNG, *supra* note 13, at 47-50.

133. BALINSKI & YOUNG, *supra* note 13, at 50 (internal quotation marks omitted) (explaining Hill's approach, and noting that his method "does not always give a result which agrees with his idea"); Chafee, *supra* note 15, at 1032-35.

134. Chafee, *supra* note 15, at 1034.

135. See, e.g., BLISS, BROWN, EISENHART & PEARL, *supra* note 74, at 4967 (preferring method of equal proportions because, mathematically, it remains neutral for larger and smaller states); Chafee, *supra* note 15, at 1032-33 (recognizing that "Method of Equal Proportions" provides "direct and simple" test to show whether states are equally proportioned with respect to number of representatives per million inhabitants).

136. BALINSKI & YOUNG, *supra* note 13, at 74-78.

137. E.g., *id.* at 81 tbl.10.3 (showing that Hill method violates quota principle more often than Webster method).

138. See *supra* Part II.A for a discussion of Hamilton's method and its paradoxical results.

139. See *supra* Part II.B for a discussion of Jefferson's method and its bias toward large states.

140. See *supra* Part II.C for a discussion of Dean's method and its favoritism of small states.

In searching for the “right” method, some researchers have focused on paradoxes, others on proportionality, and yet others on bias.¹⁴¹ Members of the first group tried to discover which of the methods was immune to the paradoxes and at the same time stayed “within the quota.”¹⁴² Their findings were surprising: not even one method would avoid the paradox and consistently stay within the quota.¹⁴³ Further, any of the methods appear prone to another paradox—the “migration paradox”—identified in 1992.¹⁴⁴ When focusing on deviations from ideal proportionality, the National Academy of Sciences committee concluded in 1929 that not only were none of the methods perfect but none of them could be identified as closest to perfection,¹⁴⁵ because such a determination depends on the criteria used to measure the discrepancy from the ideal.

III. THE ONE-PERSON-ONE-VOTE MODEL OF REPRESENTATION

When researchers set out to remedy the existing inequalities in representation, they tend to start from the methods so far discussed in this Article. They compare the efforts of Webster, Hill, Jefferson, and the others and try to improve on them, though, as we have seen, all such attempts during the last eight decades have failed. Instead, this Article now disregards these methods and seeks to derive an optimal model directly from the constitutional text.

What does the Constitution say on equal representation of the American people? First of all, it holds that the House of the Representatives shall be “*chosen . . . by the People of the several States.*”¹⁴⁶ Further on it provides that “*Representatives . . . shall be apportioned among the several States . . . according to their respective Numbers.*”¹⁴⁷ This rule is limited by three conditions: “[t]he

141. See, e.g., BALINSKI & YOUNG, *supra* note 13, at 13, 18, 29 (noting that Hamilton focused on proportional share, Jefferson sought to remedy paradoxical results of Hamilton’s method, and Dean’s method focused on reducing bias).

142. See *id.* at 80-81 (discussing how to avoid population paradox and remain within quota).

143. *Id.* at 80. Hamilton’s, Lowndes’s, and some other methods stay within the quota but are subject to the population paradox. *Id.* at 79-81. Jefferson’s, Webster’s, Dean’s, Hill’s, and Adams’s methods all violate the quota. *Id.* at 81 tbl.10.3. Nevertheless, they violate it to very different extents. BALINSKI & YOUNG, *supra* note 13, at 81. While the methods of Adams and Jefferson are expected to violate it virtually all of the time, according to Balinski and Young, Webster’s method violates the quota only once in 16,000 years and Hill’s method violates it once every 3500 years. *Id.*

144. Brent A. Bradberry, *A Geometric View of Some Apportionment Paradoxes*, 65 MATHEMATICS MAG. 3, 16 (1992). When people migrate from one state to another, and all the other states’ populations remain unchanged, migration between the first two states should not affect the representation of the others. *Cf.* Park, *supra* note 33, at 233 (demonstrating how migration between two states, where all other states’ populations remain same, affects other states’ representation apportionment in some models when it should not). But this migration does affect other states’ representation, and it does so with any method. *Id.* Methods only differ in the extent to which they are prone to this paradox. *Id.*

145. See BLISS, BROWN, EISENHART & PEARL, *supra* note 74, at 4967 (recognizing that there is basis to distinguish between methods mathematically).

146. U.S. CONST. art. I, § 2, cl. 1 (emphasis added); see also *id.* amend. XIV, § 2 (repeating this language).

147. *Id.* art. I, § 2, cl. 3, amended by U.S. CONST. amend. XIV, § 2 (emphasis added).

number of Representatives shall not exceed one for every thirty Thousand [persons],”¹⁴⁸ “each State shall have at Least one Representative,”¹⁴⁹ and “district boundaries may not cross state lines.”¹⁵⁰ The first and second requirements are set forth explicitly in Article 1, Section 2, of the Constitution.¹⁵¹ Although the first two of these constraints are made explicit in the Constitution, the Supreme Court has stated that “[t]he requirement that districts not cross state borders appears to be implicit in the text and has been recognized by continuous historical practice.”¹⁵² Through a series of amendments,¹⁵³ the Constitution requires respect for the “political equality” and the “one person, one vote” rule.¹⁵⁴ This rule requires that “as nearly as is practicable one man’s vote in a congressional election is to be worth as much as another’s”¹⁵⁵ and that “a good-faith effort to achieve precise mathematical equality”¹⁵⁶ be made when states draw the district lines.

What has not been sufficiently recognized is that with these provisions the Constitution regulates two separate issues. It regulates, first, the allocation of seats among the states, and, second, it requires equal voting weight. Both issues are also regulated by separate constitutional provisions. While allocation of seats among the states is regulated by the Apportionment Clause,¹⁵⁷ equal voting weight is regulated by the so-called equality amendments.¹⁵⁸ Although the issues are related, they are not the same and their differences must be emphasized.

It has long been understood that both constitutional requirements cannot be realized in full.¹⁵⁹ The states were not given the seats exactly according to their populations nor was the voting weight of citizens equal. But, as this Article

148. *Id.* The requirement of the maximum of one representative per 30,000 persons does not play a role in redistricting anymore because the number of representatives was fixed at 435 in 1911. U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 451 n.24 (1992) (discussing fixture of number of representatives at 435).

149. U.S. CONST. art. I, § 2, cl. 3 (emphasis added).

150. *Montana*, 503 U.S. at 447-48.

151. U.S. CONST. art. I, § 2.

152. *Montana*, 503 U.S. at 448 n.14 (citing *Montana v. U.S. Dep’t of Commerce*, 775 F. Supp. 1358, 1365 n.4 (D. Mont. 1991), *rev’d*, 503 U.S. 442 (1992)) (noting “need to maintain state boundaries”); *Montana*, 775 F. Supp. at 1368 (O’Scannlain, J., dissenting) (stating only that “[i]t is . . . the clear implication of this [constitutional] text . . . that House seats may not straddle state lines; seats must be apportioned to a particular state”).

153. Among these are the Fourteenth, Fifteenth, Seventeenth, and Nineteenth Amendments.

154. U.S. CONST. amends. XIV, XV, XVII, XIX. Several Supreme Court decisions have confirmed this regard for political equality, which was summarized by Justice Douglas’s famous words: “The conception of political equality from the Declaration of Independence, to Lincoln’s Gettysburg Address, to the Fifteenth, Seventeenth, and Nineteenth Amendments can mean only one thing—one person, one vote.” *Gray v. Sanders*, 372 U.S. 368, 381 (1963).

155. *Wesberry v. Sanders*, 376 U.S. 1, 7-8 (1964).

156. *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969).

157. U.S. CONST. art. 1, § 2, cl. 3.

158. *See id.* amends. XIII, XIV, XV (granting equal rights, including equal voting rights, to all citizens).

159. U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 445, 461 (1992); BALINSKI & YOUNG, *supra* note 13, at IX; Chafee, *supra* note 15, at 1039.

will show, only the provision for seat allocation cannot be fully realized. Equal voting weight was not realized historically only because the distribution of voting weight was always linked to the seat distribution. Seats were allocated first, and they were allocated disproportionately because of constitutional and mathematical constraints.¹⁶⁰ It was then impossible to achieve equal voting weight by way of redistricting. As a result, voting weight varied—and still varies—up to 100%.¹⁶¹

It is true that mathematical and constitutional constraints prevent a fully proportional seat allocation. But this fact does not mean that these constraints must also influence the equality of the voting weight. Instead of first allocating the seats, and then assigning each representative one vote, and at the end trying to achieve equal voting weight, this Article proceeds from the opposite direction. It will begin by treating equal voting weight as a given, then allocating the seats, then assigning the representatives the power that would keep representation and voting weight perfectly equal.

The Supreme Court has interpreted the Constitution as requiring that each vote be of equal worth.¹⁶² If each vote is equal, then any 500 votes must be worth any other 500 votes, while 900 votes should not be equal to 500 votes. If “a good faith effort” makes it possible, even 501 votes should not be worth the equivalent of 500 votes but should be worth more than 500 votes.¹⁶³ The constitutional principle of equal representation not only requires that votes be of equal worth but it also requires, as the name suggests, that people be of equal worth when they are represented.¹⁶⁴ Therefore, 900 represented people should be worth more than 500 represented people. A decision made by the representative of 900 people should be able to outweigh a decision made by the representative of 500 people. In short, political equality requires that people’s voices be of equal worth, whether those voices are expressed directly (e.g., through a referendum) or through their representatives.

It would not, then, be difficult to implement strictly equal representation of the American people’s voting will in the House of Representatives. “One person, one vote” should be understood as nothing more than “500 people, 500 votes” or “900 people, 900 votes.” If we fully respect the one man, one vote rule, the representative from Delaware shall have 758,068 votes if he or she represents 758,068 people and the representative from Montana shall be entitled to 905,316 votes.¹⁶⁵ Californian representatives, of course, shall be entitled to 33,930,798

160. The first barrier to its implementation is the implied constitutional provision that does not allow districts to cross state boundaries. *Montana*, 503 U.S. at 448 n.14. The second barrier is the theoretical impossibility of allocating to each state its ideal share of the House according to its population, because representatives cannot be cut up. Chafee, *supra* note 15, at 1021.

161. See *supra* note 97 for a discussion regarding voting-weight variation.

162. See *Wesberry v. Sanders* 376 U.S. 1, 7-8 (1964) (interpreting Constitution to require that one man’s vote be equal to another’s).

163. See *Kirkpatrick v. Preisler*, 376 U.S. 526, 530-31 (1969) (establishing “good-faith effort” requirement).

164. *Wesberry*, 376 U.S. at 7-8.

165. U.S. CENSUS BUREAU, *supra* note 2.

votes in the House.¹⁶⁶

A. *Finally, Votes of Equal Weight*

In Congress, each state would have the number of votes exactly equal to the number of its residents. This means that Montana's single representative, representing 0.32% of total U.S. population,¹⁶⁷ would also hold 0.32% of the congressional voting power and not 0.23% as is now the case. Delaware's single representative, representing 0.28% of the total population, would hold 0.28% of the congressional voting power as opposed to present 0.23%.¹⁶⁸ When Montana's congressperson would cast a vote, his "yea" would count as 905,316 "yeas."¹⁶⁹ Similarly, Delaware congressperson's "yea" would count as 785,068 "yeas" and the Wyoming congressperson's "yea" would count only as 495,304 "yeas."¹⁷⁰ All other congressmen would similarly cast "yeas" and "nays" equal to their district's populations. And all the congressmen's "yeas" and "nays" in total would equal the total population of United States at the time of the census.

The number of the representatives would remain at 435, however, and the states would retain the same number of seats as they have now. The seats would be, just as they are now, allocated by one of the formulas presented in the first part of the Article.¹⁷¹ Neither the district boundaries nor any other provision of election law would have to change. What *would* change would be the voting weight of each voter: it would become equal to all others.

Under such a system, Congress could reject no decision supported by the representatives of the majority of American population. Presently, the rejection of such a measure is easily possible. Currently, in certain combinations, a clear majority of the population can hold as few as 212 of the 435 House seats.¹⁷² It was surely not the intention of the Constitution's Framers that representatives representing a majority of the population "according to their respective Numbers" would be overruled by the representatives of a popular minority.¹⁷³ The benefit would thus extend beyond mere voting weight. Equal representation of all the people would also be achieved, as each individual would "hold" the same share of the total House representation. Moreover, representation of the states would become fully proportional. Each state would have a share of the

166. *Id.*

167. *Id.*

168. *Id.*

169. *Id.*

170. U.S. CENSUS BUREAU, *supra* note 2.

171. See *supra* Part II for a discussion of the five possible allocation methods.

172. The population of Texas, New York, Illinois, Pennsylvania, Michigan, New Jersey, Indiana, Washington, Wisconsin, Maryland, Kentucky, South Carolina, Oklahoma, Oregon, Connecticut, Mississippi, Kansas, Utah, Nevada, Idaho, Montana, Delaware, South Dakota, and any one district from any other state totals over fifty percent of the total U.S. population, while it holds only 212 seats in House of Representatives. See *infra* Table 1 for a listing of state populations and seats in the House of Representatives.

173. See U.S. CONST. art. I, § 2, cl. 3 (setting guidelines for apportioning representatives proportionately within population).

House exactly equal to that state's share of the U.S. population. Precisely equal representation of people as well as equal representation of states would be achieved. What is not, and what cannot, be achieved is fully proportional allocation of seats.

Not only does the proposed model not contravene any provision of the Constitution, it comes instead much closer to the ideal set forth by the constitutional text than the currently used schema. The Constitution requires equality of people, not equality of representatives.¹⁷⁴ What we have now in the United States is the equality of representatives with individual voters' voting weights rendered unequal. It is not an exaggeration to refer to the current system as the one-representative-one-vote model and the proposed weighted-voting system¹⁷⁵ as a one-person-one-vote model (labeled as "OPOV" in Table 1).

The table below compares the citizen's share of the representation in the House of Representatives and voting weight under the presently used model and under the proposed model. Currently, representation and voting weight varies considerably. Measured in units of one ten-billionth parts of the total House representation, it varies from 25.39 to 46.41, depending on the state of the voter's residence. The voter from Rhode Island or Wyoming exercises a vote almost double the weight of that exercised by the Montana voter. While the two states have almost equal populations, three votes from Montana are worth less than two votes from Rhode Island. With the proposed model, the vote exercised by each of the voters, whichever state he lived in, would be of equal weight.

The columns on the right side indicate each state's share of representation in the House rather than the individual voters' share and voting weight. Each state's current share of the House representation is compared to the ideal share. The right-hand column shows how, using the proposed model, the congressional power of each state would be equal to the ideal.

174. See, e.g., *Wesberry v. Sanders*, 376 U.S. 1, 8 (1963) (opining that Framers intended each citizen's vote to weigh as heavily as next citizen's vote in statewide election of representatives).

175. Systems with voters or representatives having unequal voting weight are usually referred to as weighted-voting systems. This term, however, often produces confusion because it is used to describe two different types of voting schemes. First, it may refer to the representation scheme in which voters have equal weight and representatives' voting weight is proportional to the number of people they represent. See John F. Banzhaf III, *Weighted Voting Doesn't Work: A Mathematical Analysis*, 19 RUTGERS L. REV. 317, 323 (1965) (explaining that justification for weighted voting is removing disparities of population distribution by giving legislator voting power proportional to number of constituents). The model proposed in this Article is of this kind. Second, it may refer to the elections in special districts in which voters have an unequal number of votes, depending on their property or other characteristics. See, e.g., *Salyer Land Co. v. Tulare Lake Basin Water Storage Dist.*, 410 U.S. 719, 733-35 (1973) (holding that weighting votes according to assessed value of land was rationally based and therefore did not violate Equal Protection Clause); *Kessler v. Grand Cent. Dist. Mgmt. Ass'n, Inc.*, 158 F.3d 92, 108 (2d Cir. 1998) (holding weighted-voting scheme permissible where district had special limited purpose, its activities had disproportionate effect on property owners, and it had no primary responsibilities typical of governmental entity). These two types of representation are of very different natures. The first type of voting scheme is constitutional, and the second is usually not. Furthermore, the one proposed in this Article is a perfect example of a weighted-voting system, because it produces mathematically exact equality of voting weight, while other weighted-voting models do not. See *infra* Part III.C for a discussion of weighted voting at the state and local levels.

State	2000 Population	Seats	Current Citizen's Share of House ¹⁷⁷ in Ten- Billionth Parts	Citizen's Share of House Under OPOV in Ten- Billionth Parts	Current State's Share of the House (%)	State's Share Under OPOV (%)	State's Ideal Share of the House (%)
Alabama	4,461,130	7	36.07	35.53	1.61	1.59	1.59
Alaska	628,933	1	36.55	35.53	0.23	0.22	0.22
Arizona	5,140,683	8	35.78	35.53	1.84	1.83	1.83
Arkansas	2,679,733	4	34.31	35.53	0.92	0.95	0.95
California	33,930,798	53	35.91	35.53	12.18	12.06	12.06
Colorado	4,311,882	7	37.32	35.53	1.61	1.53	1.53
Connecticut	3,409,535	5	33.71	35.53	1.15	1.21	1.21
Delaware	785,068	1	29.28	35.53	0.23	0.28	0.28
Florida	16,028,890	25	35.85	35.53	5.75	5.70	5.70
Georgia	8,206,975	13	36.41	35.53	2.99	2.92	2.92
Hawaii	1,216,642	2	37.79	35.53	0.46	0.43	0.43
Idaho	1,297,274	2	35.44	35.53	0.46	0.46	0.46
Illinois	12,439,042	19	35.11	35.53	4.37	4.42	4.42
Indiana	6,090,782	9	33.97	35.53	2.07	2.16	2.16
Iowa	2,931,923	5	39.20	35.53	1.15	1.04	1.04
Kansas	2,693,824	4	34.14	35.53	0.92	0.96	0.96
Kentucky	4,049,431	6	34.06	35.53	1.38	1.44	1.44
Louisiana	4,480,271	7	35.92	35.53	1.61	1.59	1.59
Maine	1,277,731	2	35.98	35.53	0.46	0.45	0.45
Maryland	5,307,886	8	34.65	35.53	1.84	1.89	1.89
Mass.	6,355,568	10	36.17	35.53	2.30	2.26	2.26
Michigan	9,955,829	15	34.64	35.53	3.45	3.54	3.54
Minnesota	4,925,670	8	37.34	35.53	1.84	1.75	1.75
Mississippi	2,852,927	4	32.23	35.53	0.92	1.01	1.01
Missouri	5,606,260	9	36.90	35.53	2.07	1.99	1.99

176. State population figures were taken from U.S. CENSUS BUREAU, *supra* note 2, tbl.1.

177. The figure shown in the fourth column is individual's share of the representation in the House of Representatives. Share of an individual citizen is presented in the ten-billionth parts of the House of Representatives. A citizen's share of the House is calculated by the following formula:

$$x = s/(435*p)$$

x = share of the House; s = number of seats the state holds in the House; p = population of the state.

TABLE 1 (CONTINUED): EQUALITY OF REPRESENTATION UNDER CURRENT AND PROPOSED MODELS							
State	2000 Population	Seats	Current Citizen's Share of House in Ten- Billionth Parts	Citizen's Share of House Under OPOV in Ten- Billionth Parts	Current State's Share of the House (%)	State's Share Under OPOV (%)	State's Ideal Share of the House (%)
Montana	905,316	1	25.39	35.53	0.23	0.32	0.32
Nebraska	1,715,369	3	40.20	35.53	0.69	0.61	0.61
Nevada	2,002,032	3	34.45	35.53	0.69	0.71	0.71
New Hampshire	1,238,415	2	37.13	35.53	0.46	0.44	0.44
New Jersey	8,424,354	13	35.47	35.53	2.99	2.99	2.99
New Mexico	1,823,821	3	37.81	35.53	0.69	0.65	0.65
New York	19,004,973	29	35.08	35.53	6.67	6.75	6.75
North Carolina	8,067,673	13	37.04	35.53	2.99	2.87	2.87
North Dakota	643,756	1	35.71	35.53	0.23	0.23	0.23
Ohio	11,374,540	18	36.38	35.53	4.14	4.04	4.04
Oklahoma	3,458,819	5	33.23	35.53	1.15	1.23	1.23
Oregon	3,428,543	5	33.53	35.53	1.15	1.22	1.22
Penn.	12,300,670	19	35.51	35.53	4.37	4.37	4.37
Rhode Island	1,049,662	2	43.80	35.53	0.46	0.37	0.37
South Carolina	4,025,061	6	34.27	35.53	1.38	1.43	1.43
South Dakota	756,874	1	30.37	35.53	0.23	0.27	0.27
Tennessee	5,700,037	9	36.30	35.53	2.07	2.03	2.03
Texas	20,903,994	32	35.19	35.53	7.36	7.43	7.43
Utah	2,236,714	3	30.83	35.53	0.69	0.79	0.79
Vermont	609,890	1	37.69	35.53	0.23	0.22	0.22
Virginia	7,100,702	11	35.61	35.53	2.53	2.52	2.52
Washington	5,908,684	9	35.02	35.53	2.07	2.10	2.10
West Virginia	1,813,077	3	38.04	35.53	0.69	0.64	0.64
Wisconsin	5,371,210	8	34.24	35.53	1.84	1.91	1.91
Wyoming	495,304	1	46.41	35.53	0.23	0.18	0.18
Totals	281,424,177	435					

The proposed model differs from all other models of apportionment in several aspects. First, all models discussed so far jointly apportion the seats and the representation.¹⁷⁸ By assigning a certain number of seats to a state, those models also assign the state the corresponding share of representation and decision-making power. The proposed model, on the other hand, does not deal with the allocation of seats, but leaves it to Hill, Webster, or any other of the seat-allocation methods. This model deals only with the allocation of representation and decision-making power.

Second, all methods considered so far in respect to allocation of representation have been no more than approximations of the constitutional ideal, leaving some states and their voters overrepresented and the others underrepresented. The proposed model does not approximate. It produces results that exactly correspond to the states' ideal shares.

B. What About the Equality of Representatives?

If it is so simple, why did Hamilton, Jefferson, Webster, Hill, and others not come up with such a model of equal distribution of representation earlier? Because they were, in general, concerned only with fair allocation of seats and not with equal voting weight and equal representation of individual voters, and they correctly concluded that perfectly fair seat allocation was not possible.¹⁷⁹ Significantly, at that time, the Constitution did not contain any of the equality amendments, and neither *Baker v. Carr*¹⁸⁰ nor the “one person, one vote” rule had yet appeared on the horizon. Even 150 years later, in *Colegrove v. Green*,¹⁸¹ the Court did not consider voting weight discrepancies of over 800% to be a constitutional violation.¹⁸² Today, however, the Constitution, through the “one person, one vote” rule,¹⁸³ requires designers of the electoral process to try to make voting weight as equal as possible in congressional elections.¹⁸⁴

Equality of representatives, on the other hand, is not even a constitutional principle. The Constitution speaks about each senator having one vote¹⁸⁵ but is

178. See *supra* Part II for a discussion of potential allocation methods.

179. An exception, where exact equality could be reached among both representatives and voters, would be if the population of each state were equal to, or an exact multiplier of, the ideal district. Of course, this will never happen.

180. 369 U.S. 186 (1962).

181. 328 U.S. 549 (1946).

182. In *Colegrove v. Green*, Illinois districts varied from 112,116 to 914,053. 328 U.S. at 557 app. I. At that time, these were also the smallest and the largest districts nationwide. *Id.* at 557-59 app. I; see also *id.* at 555-56 (noting that throughout history “glaring disparities have prevailed as to the contours and the population of districts” but that “remedy for unfairness in districting is to secure State legislatures that will apportion properly, or to invoke the ample powers of Congress”).

183. *Gray v. Sanders*, 372 U.S. 368, 381 (1963).

184. Especially over the last few decades, another reason for the failure to achieve equal voting weight might lie in the fact that researchers tried to solve the unequal-voting-weight problem simultaneously with the unequal-seat-allocation problem.

185. Article 1, section 3, clause 1 of the U.S. Constitution reads: “The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years;

silent on the number of votes members of the House of Representatives have. There is no provision in the Constitution requiring each representative to have exactly one vote or a provision demanding that each of the 435 representatives have equal power when making decisions. It merely states that “a Majority of each [House] shall constitute a Quorum to do Business.”¹⁸⁶ It gives authority to the House to “determine the Rules of its Proceedings,”¹⁸⁷ but this authority does not empower the House to make rules that would violate constitutional principles of equality.¹⁸⁸ In regard to decision making and voting, the Constitution mentions that bills “shall have passed the House of Representatives”¹⁸⁹ and it mentions the majority of “two thirds” of the House on three occasions¹⁹⁰ and “one fifth of those Present” on one.¹⁹¹ It indicates when the votes “shall be determined by yeas and Nays.”¹⁹² The rule according to which each representative has a vote of equal weight is implied in the Rules of the House of Representatives.¹⁹³

and each Senator shall have one Vote.”

186. *Id.* art. I, § 5, cl. 1.

187. *Id.* art. I, § 5, cl. 2.

188. See *infra* notes 263-64 and accompanying text for a discussion of the Rules of the House of Representatives and the Constitution.

189. U.S. CONST. art. I, § 7, cl. 2.

190. *Id.* art. I, § 5, cl. 2 (requiring concurrence of two-thirds of House to expel member); *Id.* art. I, § 7, cl. 2. (requiring two-thirds vote of both houses to override presidential veto of bill); *Id.* art. V (requiring two-thirds vote of both houses to propose amendments to Constitution).

191. *Id.* art. I, § 5, cl. 3 (requiring tally of votes be recorded in House journal of proceedings if one-fifth of representatives present so desire).

192. U.S. CONST. art. I, § 7, cl. 2 (requiring that votes of both houses on vetoed bills be in form of yeas and nays).

193. Interestingly, even the Rules of the House of Representatives do not expressly state that each representative has one voice:

The Speaker shall rise to put a question but may state it sitting. The Speaker shall put a question in this form: “Those in favor (of the question), say ‘Aye.’”; and after the affirmative voice is expressed, “Those opposed, say ‘No.’”. [sic] After a vote by voice under this clause, the Speaker may use such voting procedures as may be invoked under rule XX.

H.R. DOC. NO. 107-284, at 345 (2003). The Rules further provide that:

1. (a) The House shall divide after the Speaker has put a question to a vote by voice as provided in clause 6 of rule I if the Speaker is in doubt or division is demanded. Those in favor of the question shall first rise from their seats to be counted, and then those opposed.

(b) If a Member, Delegate, or Resident Commissioner requests a recorded vote, and that request is supported by at least one-fifth of a quorum, the vote shall be taken by electronic device unless the Speaker invokes another procedure for recording votes provided in this rule. A recorded vote taken in the House under this paragraph shall be considered a vote by the yeas and nays.

(c) In case of a tie vote, a question shall be lost.

2. (a) Unless the Speaker directs otherwise, the Clerk shall conduct a record vote or quorum call by electronic device. In such a case the Clerk shall enter on the Journal and publish in the Congressional Record, in alphabetical order in each category, the names of Members recorded as voting in the affirmative, the names of Members recorded as voting in the negative, and the names of Members answering present as if they had been called in the manner provided in clause 3. . . .

. . . .

It is unlikely that the founding fathers, who expressly mandated that each senator should have one vote, intentionally remained silent on the number of votes given to House members. More probably, they intended to give both House and Senate members identical numbers of votes. Today, however, the equality of votes cast by voters is a firm constitutional and democratic principle, while equality of representatives is not.¹⁹⁴ It might be desirable to keep both, but that is impossible. A decision must be made as to which principle to observe strictly and which one to approximate. We can either decide to hold by the principle that is the foundation of democratic rule or hold by the one that we are used to.

C. *Weighted Voting at the State and Local Level*

At the local level, weighted-voting schemes are far from novel. In the states of New Jersey and New York, they have been used for decades to elect members to county boards of supervisors. Nevertheless, apart from a few articles in 1960s, they were not subject to scholarly research.¹⁹⁵ In most cases, a board of supervisors has a number of members equal to the number of towns in the county, with each town having one representative.¹⁹⁶ The representative then casts a number of votes proportional to the population of his town.¹⁹⁷ In general, votes of the representatives are not truly proportional to the populations they represent.¹⁹⁸ Sometimes the number of votes cast by each board member differs from one vote to another depending on the type of voting and the majority

3. The Speaker may direct the Clerk to conduct a record vote or quorum call by call of the roll. In such a case the Clerk shall call the names of Members, alphabetically by surname.

...

4. (a) The Speaker may direct a record vote or quorum call to be conducted by tellers. In such a case the tellers named by the Speaker shall record the names of the Members voting on each side of the question or record their presence, as the case may be, which the Clerk shall enter on the Journal and publish in the Congressional Record.

H.R. DOC. NO. 107-284, at 787-98 (2003).

194. *Gray*, 372 U.S. at 379-81 (“The idea that every voter is equal to every other voter in his State, when he casts his ballot in favor of one of several competing candidates, underlies many of our decisions.”).

195. For a discussion on weighted voting, see Banzhaf, *supra* note 175, at 322-35; Ronald E. Johnson, *An Analysis of Weighted Voting as Used in Reapportionment of County Governments in New York State*, 34 ALB. L. REV. 1, 10-29 (1969); Jack B. Weinstein, *The Effect of the Federal Reapportionment Decisions on Counties and Other Forms of Municipal Government*, 65 COLUM. L. REV. 21, 41-46 (1965). Since the 1960s, the first article appears to be Keith R. Wesolowski, *Remedy Gone Awry: Weighing In on Weighted Voting*, 44 WM. & MARY L. REV. 1883 (2003).

196. See Johnson, *supra* note 195, at 4-5 (describing structure of county government in New York).

197. See *id.* at 10 (explaining theoretical mechanics of weighted voting).

198. In Delaware County, New York, for example, the representative of a town whose population consisted of 14.12% of the county’s residents had 13.45% of the total votes on the county board of supervisors. *Roxbury Taxpayers Alliance v. Del. County Bd. of Supervisors*, 80 F.3d 42, 45 (2d Cir. 1996). Representatives of towns with population shares of 7.21% and 1.17% have 7.30% and 1.12% of the votes, respectively. *Id.*

needed for the measure to pass.¹⁹⁹

Commentators have generally criticized weighted-voting models in which representatives' powers differed considerably.²⁰⁰ John F. Banzhaf III, for example, has vigorously argued that there is a difference between voting weight and voting power²⁰¹ and that a representative enjoys disproportionate power if he represents a larger group of people, a multimember district, a larger single-member district, or even a larger state.²⁰² According to Banzhaf, a representative having five times more votes than another representative has much more than five times more power than his colleague.²⁰³ He has argued similarly about the disproportionate power of voters in, and representatives from, multimember districts.²⁰⁴ Although each voter's weight in districts of various sizes appears to be equal because the ratio of voters to seats is the same across districts, a vote in a larger district has considerably more practical influence on elections and legislative outcomes than does a vote in a single-member or smaller multimember district.²⁰⁵

199. Delaware County, New York, has a nineteen-member board of supervisors. *Id.* at 44 (“[A] total of 3,480 votes are available for proposed County legislation whose passage by the Board requires the affirmative vote of a simple majority; a total of 2,428 votes are available if a two-thirds majority is needed; and a total of 2,244 votes are available if a three-fifths majority is needed. Local Law No. 4 allocates the available votes, for each type of vote taken by the Board, to the Board members in proportion to their respective towns' populations based on the 1990 census. For example, as to proposed County legislation needing the affirmative vote of a simple majority, the Supervisor representing Bovina (population 550) is allocated 39 votes, which he or she must cast as a bloc; the Bovina Supervisor has, instead, 28 votes when a two-thirds majority is needed, and 27 votes when a three-fifths majority is required. In comparison, the Supervisor representing Sidney (population 6,667) has 468 votes when a simple majority is needed, 358 votes when the affirmative vote of two-thirds of the Board's total votes is required, and 308 votes when a three-fifths majority is needed.”).

200. *See, e.g.*, Banzhaf, *supra* note 175, at 324-35 (explaining how weighted voting fails to accomplish intended goals in theory and in practice); Johnson, *supra* note 195, at 11-16 (describing assumptions leading to basic fallacy of weighted voting); Weinstein, *supra* note 195, at 45 (“Weighted voting presents serious operational as well as legal objections.”).

201. *See* John F. Banzhaf III, *Multi-Member Electoral Districts—Do They Violate the “One Man, One Vote” Principle*, 75 YALE L.J. 1309, 1314 (1966) [hereinafter Banzhaf, *Multi-Member Electoral Districts*] (noting that “[s]erious questions arise” as to equal representation “when the districts are of substantially unequal populations and the legislators are also unequal in their voting power,” as in weighted voting); John F. Banzhaf III, *One Man, 3.312 Votes: A Mathematical Analysis of the Electoral College*, 13 VILL. L. REV. 304, 307 (1968) [hereinafter Banzhaf, *One Man, 3.312 Votes*] (describing technique for accurately measuring voting power); Banzhaf, *supra* note 175, at 324-28 (demonstrating, with mathematical examples, that legislator's voting power is not always proportional to number of votes he can cast).

202. Banzhaf, *Multi-Member Electoral Districts*, *supra* note 201, at 1319-32. Banzhaf has argued “that a voter in New York State has 3.312 times the voting power of a citizen in another part of the country” in presidential elections. Banzhaf, *One Man, 3.312 Votes*, *supra* note 201, at 306.

203. Banzhaf, *supra* note 175, at 324-25.

204. Banzhaf, *Multi-Member Electoral Districts*, *supra* note 201, at 1319-32.

205. *See id.* at 1310-14, 1323 (“In electoral systems employing different sized multi-member districts, residents of the larger districts thus have more voting power than those of less populous districts.”).

The courts, however, have not followed Banzhaf's arguments.²⁰⁶ Except for rare instances,²⁰⁷ they have disregarded them in both multimember district cases²⁰⁸ and in weighted-voting cases.²⁰⁹ Although the Supreme Court has been criticized for not being able to understand Banzhaf's mathematics,²¹⁰ the reason for the Court's decisions probably lies in an important distinction drawn between the equally weighted vote and the equally powerful vote. In general, American as well as foreign courts have tended to protect only the right to an equally weighted vote and not the right to an equally powerful vote.²¹¹

206. The Supreme Court faced Banzhaf's arguments in *Whitcomb v. Chavis*, 403 U.S. 124 (1971). In that case, the Court upheld an apportionment plan with combined single-member and multimember districts. *Id.* at 160. Justice Harlan criticized the Court in his separate opinion by saying that "[t]he only relevant difference between the elementary arithmetic on which the Court relies and the elementary probability theory on which Professor Banzhaf relies is that calculations in the latter field cannot be done on one's fingers." *Id.* at 168 n.2 (opinion of Harlan, J.).

207. The courts have followed his argument that a representative with over fifty percent of the votes has in fact 100% of the power. See *infra* notes 214-15 and accompanying text for discussion of a court heeding Banzhaf's arguments.

208. *Chavis*, 403 U.S. at 146 (majority opinion).

209. *Bd. of Estimate v. Morris*, 489 U.S. 688, 697-98 (1989). While courts did not follow Banzhaf's arguments, local government bodies did follow them and therefore adjusted the power of representatives. See, e.g., *Reform of Schoharie County v. Schoharie County Bd. of Supervisors*, 975 F. Supp. 191, 193 (N.D.N.Y. 1997) (relying on Second Circuit's reasoning in *Roxbury Taxpayers Alliance v. Del. County Bd. of Supervisors*, 80 F.3d 42 (2d Cir. 1996), that minor deviations in town's share of county's population and supervisor's allocated votes as percentage of board's total votes are constitutional and that local governments may organize themselves according to needs of community), *aff'd*, 152 F.3d 920 (2d Cir. 1998). Because minor deviations in district populations are allowed at the local level, these adjustments are acceptable, too. *Id.*

210. See *supra* note 206 for a discussion of Justice Harlan's criticism of the majority in *Whitcomb v. Chavis*.

211. While the equally weighted vote is a part of the individual's right to vote, the equally powerful vote cannot be regarded as such. Daniel H. Lowenstein & Jonathan Steinberg, *The Quest for Legislative Districting in the Public Interest: Elusive or Illusory?*, 33 UCLA L. REV. 1, 13 (1985). On the difference between the equally weighted vote and the equally powerful vote, see John R. Low-Beer, Note, *The Constitutional Imperative of Proportional Representation*, 94 YALE L.J. 163, 163 n.2, 164 n.3 (1984). Low-Beer argues that not only the right to an equally weighted vote but also the right to an equally powerful vote should be constitutionally protected. *Id.* at 182-83. The theory he defends has strong proponents, especially in Germany. See, e.g., H. Meyer, *Demokratische Wahl und Wahlsystem*, in 2 HANDBUCH DES STAATSRECHTS 264 (Isensee & Kirchhof eds., Mueller, Heidelberg 1987) (arguing that only proportional representation systems are democratic). Nevertheless, even the German Federal Constitutional Court has rejected such views and ruled that both first-past-the-post and proportional representation systems were democratic and constitutional. Bundesverfassungsgericht [BVerfG] [Federal Constitutional Court] Apr. 5, 1952, 1 Entscheidungen des Bundesverfassungsgerichts [BVerfGE] 208 (F.R.G.). Other highest foreign courts have also ruled that the right to an equally weighted vote is constitutionally protected while the right to equally powerful or equally influential vote is not. See, e.g., Slovenian Const. Court Ruling U-I-354/96, dated Mar. 9, 2000 (Official Gazette RS, no. 31/2000), translated at <http://odlocitve.us-rs.si/users/us-odl.nsf/o/F642A095AD0C9128C125717200280A0C> (providing that right to equal vote means that each voter has equal number of votes and equal opportunity for those votes to be considered rather than equal practical effect of vote and that right to equal vote does not mandate implementation of proportional representation system).

Courts have consistently held weighted-voting schemes to be constitutional.²¹² The only two conditions that courts have required are that the numbers of votes held by the representatives are approximately proportional to the district populations and that none of the representatives possess over fifty percent of the total board's votes.²¹³ In *Iannucci v. Board of Supervisors of Washington*²¹⁴ the court noted that a weighted-voting plan would be invalid if over fifty percent of the population were represented by a legislator entitled to cast over fifty percent of the votes because, in such a case, the representative would in fact possess 100% voting power, at least with respect to measures requiring a majority vote for passage.²¹⁵ In Nassau County, New York, the town of Hempstead comprised some fifty-seven percent of the county's population.²¹⁶ Following *Iannucci*, the board of supervisors designed a weighted-voting plan in which representatives of Hempstead held 49.6% of the voting power of the board.²¹⁷ The court, however, held that this scheme violated the "one person, one vote" rule.²¹⁸ The weighted-voting plan was changed.²¹⁹ The new plan gave Hempstead two representatives who together held about fifty-five percent of the board's votes.²²⁰ The total deviation between board members' ideal shares and the shares they actually held was 7.3%.²²¹ The numbers of votes held by the supervisors varied from two to thirty-five, and all six supervisors together held 130 votes.²²² In *Franklin v. Krause*²²³ the court found this scheme to be constitutional.²²⁴ After the Supreme Court dismissed an appeal,²²⁵ other courts, relying on this decision, held all weighted-voting schemes to be constitutional. In *Slater v. Board of Supervisors of Cortland*,²²⁶ a weighted-voting scheme with a deviation of two percent was upheld.²²⁷ After the 1980 census, the constitutionality of a new Nassau County voting scheme was challenged again.²²⁸

212. *Roxbury Taxpayers Alliance*, 80 F.3d at 49; *League of Women Voters of Nassau County v. Nassau County Bd. of Supervisors*, 737 F.2d 155, 167 (2d Cir. 1984); *Reform of Schoharie County*, 975 F. Supp. at 195; *Franklin v. Krause*, 298 N.E.2d 68, 73 (N.Y. 1973); *Slater v. Bd. of Supervisors*, 346 N.Y.S.2d 185, 186 (App. Div. 1973).

213. *Krause*, 298 N.E.2d at 69.

214. 229 N.E.2d 195 (N.Y. 1967).

215. *Iannucci*, 229 N.E.2d at 199.

216. *Franklin v. Mandeville*, 256 N.E.2d 534, 535 (N.Y. 1970).

217. *Id.*

218. *Id.*

219. *Franklin v. Krause*, 298 N.E.2d 68, 69 (N.Y. 1973).

220. *Id.*

221. *Id.*

222. *Id.* at 69-70.

223. 298 N.E.2d 68 (N.Y. 1973).

224. *Krause*, 298 N.E.2d at 73.

225. *Franklin v. Krause*, 415 U.S. 904, 904 (1974).

226. 346 N.Y.S.2d 185 (App. Div. 1973).

227. *Slater*, 346 N.Y.S.2d at 186.

228. *League of Women Voters of Nassau County v. Nassau County Bd. of Supervisors*, 737 F.2d 155, 156 (2d Cir. 1984).

This time, total deviation was 5.26%.²²⁹ Because deviation was this time even smaller than in the previous decade, the court upheld the plan.²³⁰

In two cases following the 1990 census, the courts faced the claim that the nonvoting functions of supervisors were also critical. In *Reform of Schoharie County v. Schoharie County Board of Supervisors*,²³¹ plaintiffs identified as these nonvoting functions “service on committees, public and private discussion and debate, communications to and from constituents, communication with county executive officers, and development of ideas and proposals for county legislation and programs.”²³² In *Roxbury Taxpayers Alliance v. Delaware County Board of Supervisors*,²³³ plaintiffs argued that “weighted voting was insufficient to assure them equal representation because, given the Supervisors’ equal ability to participate in, *inter alia*, floor debates and committee work, Board members from less populous towns had disproportionate ability to influence County legislation.”²³⁴ These arguments did not seem of high importance to the courts. The court in *Roxbury Taxpayers Alliance* determined that “there is nothing in the record to indicate that Delaware County’s weighted-voting system provides representation that is not qualitatively fair and effective.”²³⁵

The constitutionality of weighted voting is thus no longer an issue. Moreover, in a 2001 case, *Korman v. Giambra*,²³⁶ weighted voting joined a group of voting schemes that courts institute when they cannot decide on a districting plan.²³⁷ In numerous attempts in New York’s Erie County, no district plan was able to receive a two-thirds majority.²³⁸ After a district judge considered several proposals to redistrict, he decided not to adopt any of them but to keep the districts from the 1990 census and give the representatives votes proportionally

229. *Id.* at 160.

230. *Id.* at 168-72.

231. 975 F. Supp. 191 (N.D.N.Y. 1997), *aff’d*, 152 F.3d 920 (2d Cir. 1998). In this case, the maximum discrepancy between a town’s percentage share of a county’s population and its supervisor’s allocated votes, expressed as a percentage of the county board of supervisors’ total votes, was 2.1% for matters requiring a majority vote and 2.72% for votes requiring a supermajority of two-thirds. *Reform of Schoharie County*, 975 F. Supp. at 194.

232. *Id.* (internal quotation marks omitted).

233. 80 F.3d 42 (2d Cir. 1996). In this case, the total deviation was 0.92%. *Roxbury Taxpayers Alliance*, 80 F.3d at 46.

234. *Id.* at 45.

235. *Id.* at 49; *see also Reform of Schoharie County*, 975 F. Supp. at 194-95 (relying on reasoning of Second Circuit in *Roxbury Taxpayers Alliance* and stating “[a]rguably, the conclusion that there is no qualitative unfairness in Delaware County’s similar system disposes of the notion that there is any constitutional infirmity inherent in the nonvoting functions of Schoharie County’s supervisors”).

236. No. 01-CV-0369E(SR), 2001 WL 967552 (W.D.N.Y. Aug. 8, 2001).

237. *See Korman*, 2001 WL 967552, at *1 (reasoning that weighted-voting plan would “provide[] a perfect interim answer” for solving alleged underrepresentation problems). Until now courts usually designed their own districting plans or instituted cumulative or limited voting schemes. *See* SHAUN BOWLER, TODD DONOVAN & DAVID BROCKINGTON, ELECTORAL REFORM AND MINORITY REPRESENTATION: LOCAL EXPERIMENTS WITH ALTERNATIVE ELECTIONS 3-6 (2003) (giving overview of various electoral systems employed to increase minority representation).

238. *Korman*, 2001 WL 967552, at *1.

weighted according to the populations they represented.²³⁹ The legislators' weighted votes were calculated to three decimal places, with the seventeen districts having seventeen total votes.²⁴⁰

Courts have, as shown, upheld weighted-voting schemes with large discrepancies in the weight of representatives' votes despite Banzhaf's studies showing that these discrepancies produce distortions of voting power. But, in fact, his objections to weighted voting are not relevant to the House representation model proposed in this Article. Banzhaf has discussed only examples in which ratios among the representatives were 8:1²⁴¹ or 34:1.²⁴² Even when he was researching electoral bodies "where differences in the number of votes allocated [were] not large," he researched ratios of 4:1 and 5:1 and he focused on small bodies.²⁴³ With 435 members of the House and ratios up to 2:1, there would be no distortion of power such as those that concerned Banzhaf. Other objections to weighted voting are similarly irrelevant to weighted voting applied to the House of Representatives. Two of these objections, namely those pertaining to usurpation of legislative power and to provincialism, only refer to the application of weighted voting at the local level.²⁴⁴ Reliance on census data was also mentioned as a "possible problem with the weighted voting system"²⁴⁵ since this data was said to be "highly suspect."²⁴⁶ But reliance on census data cannot in fact be a flaw in a weighted-voting system. In the apportionment and redistricting processes, reliance on census data is required by the Constitution.²⁴⁷ Furthermore, if there truly were some discrepancies between actual populations and the census results, these discrepancies would have much less impact if weighted voting were used.²⁴⁸

As to the advantages of weighted voting, at least two of them stand out. The first advantage is its potential to produce exact equality of each vote's weight.²⁴⁹ For reasons that are unclear, New Jersey and New York counties have never opted for strict equality but have always preferred to adjust the ratios among the districts by a few percent to slightly overrepresent some towns and

239. *Id.*

240. *Id.*

241. Banzhaf, *supra* note 175, at 326.

242. Banzhaf, *One Man, 3.312 Votes*, *supra* note 201, at 306.

243. Banzhaf, *supra* note 175, at 334.

244. See Wesolowski, *supra* note 195, at 1905-08 (discussing weighted-voting system as taking power from legislatures' hands and giving rise to provincialism and isolationism in smaller districts).

245. *Id.* at 1908.

246. *Id.* at 1909.

247. U.S. CONST. art. I, § 2, cl. 3.

248. If, for example, a state's actual population were two percent higher than that counted by census, the proposed model would result in the state holding only two percent less representation than it would hold if all the population were counted by census. Currently, this two percent can result in the state losing the whole seat. Regardless of weighted voting, the Supreme Court has rejected the use of sampling in census and redistricting. See *Dep't of Commerce v. U.S. House of Representatives*, 525 U.S. 316, 338 (1999) (finding that, under Census Act, statistical sampling could not be used to collect census data for apportioning representatives or developing congressional districts).

249. Wesolowski, *supra* note 195, at 1902.

underrepresent others.²⁵⁰

The other advantage of weighted voting is that it permits the design of districting plans that contain large district population discrepancies yet still keep equal voting weight for individual voters.²⁵¹ This flexibility allows local jurisdictions to give more consideration to criteria other than population equality, such as compactness, contiguity, respect for political subdivision boundaries, respect for communities of interest, and many others.²⁵² Legislatures would no longer have to choose between equal voting weight and other standards. They can easily realize all of these goals simultaneously. Districts can be divided along political or administrative lines, whatever the size of these subdivisions, and such a strategy eliminates gerrymandering.²⁵³ Whether legislators will want to impose such “antigerrymandering” measures on themselves will be up to them, of course.²⁵⁴

The Supreme Court has generally imposed less strict population requirements on state and local districting than on congressional districting.²⁵⁵ At the state and local level, voting-weight differences of ten percent are the rule rather than the exception, and it might be desirable to introduce a system that would equalize the weight of each vote.

250. See, e.g., *Korman v. Giambra*, No. 01-CV-0369E(SR), 2001 WL 967552, *1 (W.D.N.Y. Aug. 8, 2001) (finding New York county’s redistricting plan, which slightly underrepresented certain districts, to be permissible).

251. Wesolowski, *supra* note 195, at 1903.

252. See Lowenstein & Steinberg, *supra* note 211, at 1-6, 11-64, and *Karcher*, 462 U.S. at 740, for a discussion of the arguments in favor of and against the use of various districting criteria.

253. See Wesolowski, *supra* note 195, at 1903 (arguing that weighted-voting system makes it unnecessary and undesirable for legislatures to gerrymander).

254. Some authors have argued that different antigerrymandering measures, especially in the form of districting criteria, should be constitutionalized. For a discussion of this question, see Lowenstein & Steinberg, *supra* note 211, at 4. For the view that “parties are grown-ups who, generally speaking, can be expected to take care of themselves,” see Daniel Hays Lowenstein, *Associational Rights of Major Political Parties: A Skeptical Inquiry*, 71 TEX. L. REV. 1741, 1790 (1993). See also Daniel Hays Lowenstein, *Bandemer’s Gap: Gerrymandering and Equal Protection*, in *POLITICAL GERRYMANDERING AND THE COURTS* 64, 79-90 (Bernard Grofman ed., 1990) (considering Supreme Court’s plurality decision in *Bandemer*, and concluding that “[t]he plurality opinion does not declare gerrymandering, extreme or otherwise, unconstitutional” but rather “declares that the gerrymander may not be directed against groups that are already victimized by pervasive discrimination”).

255. Compare *Mahan v. Howell*, 410 U.S. 315, 326 (1973) (finding Virginia district reapportionment statute did not violate Equal Protection Clause), *modified*, 411 U.S. 922 (1973), and *Abate v. Mundt*, 403 U.S. 182, 186 (1971) (finding Rockland County, New York, districting plan did not violate Equal Protection Clause), with *White v. Weisler*, 412 U.S. 783, 796 (1973) (finding Texas senate bill dividing state into twenty-four congressional districts unreasonable and unconstitutional), and *Kirkpatrick v. Preisler*, 394 U.S. 526, 532 (1969) (finding Missouri congressional redistricting plan did not satisfy constitutional standards). These cases are cited in Lowenstein & Steinberg, *supra* note 211, at 17 n.48. The reason for the distinction between state and local districting and congressional districting is obscure. As Lowenstein and Steinberg say, “[t]he official explanation for this distinction, that congressional districting is based on article I, section 2 of the Constitution, while state and local districting are controlled by the equal protection clause, is no explanation at all.” *Id.* For “a more interesting effort at justification,” the authors refer to Charles L. Black Jr., *Representation in Law and Equity*, in 10 *NOMOS: REPRESENTATION* 131 (1968). *Id.*

IV. THE CONSTITUTION: "EQUAL PEOPLE" OR "EQUAL REPRESENTATIVES"?

A. *Is the Currently Used Model Unconstitutional?*

The proposed model is, as we have seen, undoubtedly constitutional. It also assures that the votes cast by all those voting for House representatives, regardless of their state of residency, are exactly equal. Currently, voting weight varies by over eighty percent.²⁵⁶ For this reason, this Article refers to the proposed model as the one-person-one-vote model and to the current model as the one-representative-one-vote model. Nevertheless, it is unlikely that the House members will be eager to enact the new model.

The majority of the House is in the hands of the representatives of an overrepresented minority.²⁵⁷ While half of the population is overrepresented and half is underrepresented, the overrepresented half holds 223 House seats and the underrepresented half holds only 212.²⁵⁸ If the new model were to be introduced and the strength of each vote were thereby equalized, these 223 House members would lose some of their power. Because these 223 members now have more power than they would have if each vote were of equal worth, it is unlikely that they would be excited to vote for the equalization of the voting weight. It would seem likely that judicial action would be needed to rule the one-representative-one-vote system unconstitutional and to equalize voting weight.

This section will examine what impact the presentation of the new, one-person-one-vote model might have on the constitutionality of the current, one-representative-one-vote model. In other words, could the current model be found unconstitutional because it allows a difference in voting weight that is up to 100%, while the proposed model removes such differences? Is this a justiciable issue? Which constitutional provisions could the plaintiffs rely on? What standard of review would apply in the case of a constitutional challenge? Would the present method sustain such a standard?

256. See *supra* Part III for an analysis of the proposed model, including a discussion of equality of voting weight, equality of representatives, and weighted voting at the state and local levels.

257. Cf. Lowenstein & Steinberg, *supra* note 211, at 13 (discussing how vote in overpopulated district is devalued compared to vote in less populated district). If half of the population is underrepresented and the other half is overrepresented, it is logical that the representatives of the overrepresented half hold a majority in the legislature. Of course, that should not be the case, because nobody is supposed to be overrepresented. If they represent only half of the population, they should hold half of the legislature.

258. The population of California, Florida, Ohio, Georgia, North Carolina, Massachusetts, Tennessee, Missouri, Arizona, Minnesota, Louisiana, Alabama, Colorado, Iowa, New Mexico, West Virginia, Nebraska, Maine, New Hampshire, Hawaii, Rhode Island, North Dakota, Alaska, Vermont, Wyoming, and any ten of Virginia's districts holds 223 House seats and represents 49.92% of the total U.S. population. As described earlier in this Article, representatives of only 48.77% of the population hold a majority of the House seats. See *supra* note 6 and accompanying text for a discussion of how representatives of 48.77% of the population, holding a majority of the House seats, can block a decision of the majority.

B. *The “Political Question Doctrine” and Justiciability*

In the case of a legal challenge, the government would likely move to dismiss a lawsuit on the grounds that the number of representatives’ votes is a nonjusticiable political question.

The political question doctrine refers to allegations of constitutional violations that the federal courts will not adjudicate or decide, even though all of the jurisdictional and other justiciability requirements are met. The Supreme Court has held that constitutional interpretation in some areas are “political questions” and should be left to the politically accountable branches of government: the President and Congress.²⁵⁹

Despite the possibility of reliance on the political question doctrine in some areas, the Court does not rely on it when voting weight or equal representation is in question. In voting-weight cases, the Court has rejected all motions suggesting the use of the doctrine²⁶⁰ since *Baker v. Carr*.²⁶¹ It has also dismissed such motions in the seat-allocation case of *United States Department of Commerce v. Montana*.²⁶² Because the one-representative-one-vote model is implied by the Rules of the House of Representatives, it is important to know that these rules have been subject to constitutional review since 1892.²⁶³ According to Erwin Chemerinsky and Catherine Fisk, the challenges to congressional procedures were held justiciable in all but one case.²⁶⁴ “In other words, each chamber of

259. Catherine Fisk & Erwin Chemerinsky, *The Filibuster*, 49 STAN. L. REV. 181, 225-26 (1997) (footnote omitted).

260. See, e.g., U.S. Dep’t of Commerce v. Montana, 503 U.S. 442, 456-59 (1992) (refusing to use political question doctrine in analyzing apportionment method); Powell v. McCormack, 395 U.S. 486, 548-49 (1969) (rejecting political question doctrine in finding authority to review case to ensure ability of people to select their legislators).

261. 369 U.S. 186 (1962). In *Baker v. Carr*, the Court articulated this frequently quoted conception of the political question doctrine:

Prominent on the surface of any case held to involve a political question is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court’s undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

369 U.S. at 217.

262. 503 U.S. 442 (1992). The Court unanimously rejected the government’s argument that Congress’s selection of any of the alternative apportionment methods presents a “political question” that is not subject to judicial review. *Montana*, 503 U.S. at 458. It held that the constitutional challenge to apportionment was “unquestionably within [the Court’s] jurisdiction” and that “[t]he case before us today is ‘political’ in the same sense that *Baker v. Carr* was a ‘political case.’ It raises an issue of great importance to the political branches.” *Id.* at 458-59 (citation omitted).

263. “[The House] may not by its rules ignore constitutional restraints or violate fundamental rights” *United States v. Ballin*, 144 U.S. 1, 5 (1892). “[Rules adopted by the House of Representatives] have the force of law, and Congressmen must abide by them. [Such] rules are subject only to constitutional restrictions.” *Shape of Things to Come, Inc. v. Kane County*, 588 F. Supp. 1192, 1193 (N.D. Ill. 1984) (citations omitted).

264. Fisk & Chemerinsky, *supra* note 259, at 226 (“The exception was *Field v. Clark*, in which the

Congress has complete discretion to make its own rules as long as the rules do not violate the Constitution”²⁶⁵ and the courts are here to decide whether the Constitution is violated.

C. *Which Standard of Review? Which Level of Scrutiny?*

Because the challenge of constitutionality is unquestionably justiciable, the question remains—which standard of review applies in such a case? In order to answer this question, this Article will rely on the Court’s past practice as well as theoretical analyses of the political-equality cases.²⁶⁶ As there are several definitions, kinds, and classifications of equalities,²⁶⁷ this Article emphasizes that the issue at stake is one of the formal equality of the voters and their votes. To be precise, it is the question of equal voting weight.²⁶⁸

The Supreme Court has, in a series of cases related to the equality of voting weight, applied a most stringent level of review.²⁶⁹ Although the Court itself does

Court dismissed a claim that a section of a bill passed by Congress was omitted from the final version of the law authenticated by the Speaker of the House and the Vice President and signed by the President. The Court emphasized that judicial review was unnecessary because Congress could protect its own interests by adopting additional legislation.” (footnote omitted) (citing *Field v. Clark*, 143 U.S. 649 (1892))).

265. *Id.* at 230.

266. Richard Hasen’s recently published book gives an interesting analysis and classification of Supreme Court equality cases in election law. HASEN, *supra* note 7, at 73-100.

267. Douglas Rae distinguished at least 108 theoretical conceptions of political equality. *See generally* DOUGLAS RAE ET AL., *EQUALITIES* (1981).

268. Hasen organizes the Supreme Court’s major political-equality decisions into four groups: formal equality, race, wealth, and political parties. The subgroup within the formal equality group attracting the most attention from the Court is “weighting of votes.” *See generally* HASEN, *supra* note 7, at 18-46 (dividing decisions by substantive areas of law of political representation). Formal equality can be defined as each person having one vote and the votes having mathematically equal weight. This is achieved when each representative represents an equal number of people. *See id.* at 22 (discussing Supreme Court’s decision in *Wesberry v. Sanders* to invalidate election of congresspeople from districts of unequal population). Nevertheless, the actual impact of someone’s vote on the result is a different issue. There is a vast amount of literature on the nonformal equality of voting power, especially in regard to the voting power of racial minorities and supporters of minority parties. Authors claim that formal equality does not do enough for fair representation and suggest that proportional representation, majority-minority districts, and other fair representation measures be taken to increase representation of underrepresented groups. *See, e.g.*, BOWLER, DONOVAN & BROCKINGTON, *supra* note 237, at 3 (discussing greater minority representation under new electoral systems than under previous majoritarian systems); LANI GUINIER, *LIFT EVERY VOICE: TURNING A CIVIL RIGHTS SETBACK INTO A NEW VISION OF SOCIAL JUSTICE* 92 (1998) (describing winner-take-all voting system as reducing politics to game in which some voters are merely spectators); LANI GUINIER, *THE TYRANNY OF THE MAJORITY: FUNDAMENTAL FAIRNESS IN REPRESENTATIVE DEMOCRACY* 1-20 (1994) (describing unfairness to minorities resulting from formal equality and proposing cumulative voting as possible alternative); WILMA RULE & JOSEPH F. ZIMMERMAN, *UNITED STATES ELECTORAL SYSTEMS: THEIR IMPACT ON WOMEN AND MINORITIES* 5 (1992) (describing negative effects of voting system on minorities and women).

269. *E.g.*, *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969) (finding state must justify variance in representation of equal numbers of people no matter how small); *Swann v. Adams*, 385 U.S. 440, 445 (1967) (finding state must make effort to achieve equality and must justify deviations).

not used the phrase “strict scrutiny” to describe it, commentators do.²⁷⁰ Especially in the case of congressional elections, it has required that “a good-faith effort to achieve precise mathematical equality”²⁷¹ be made. In the case in which the Court decided between Hill’s and Dean’s methods of seat allocation, however, it used a less strict standard.²⁷² The Court also used this standard later in two census decisions.²⁷³ In the following, both standards are examined. Of particular importance are the reasons that led to the use of a less strict standard in the *Montana* decision, because those reasons may help us classify possible challenges to the Rules of the House. This Article presents several reasons why a challenge to the current apportionment system would be more likely to fall into the group of cases reviewed with a stringent level of scrutiny. Finally, this Article concludes that whichever of the above standards is used, the one-person-one-vote model would pass the test and make the present one-representative-one-vote model unconstitutional.

D. Equal Voting Weight Cases and the Strictness of the Review

The Supreme Court has continuously held that equal voting weight issues constitute fully justiciable issues²⁷⁴ and has been highly strict when reviewing laws distributing voting weight unequally.²⁷⁵ In *Wesberry v. Sanders*,²⁷⁶ the Court struck down the election of members of Congress from unequally populated districts.²⁷⁷ In *Reynolds v. Sims*,²⁷⁸ the Court applied the Equal Protection Clause to invalidate unequally weighted voting in state legislative elections,²⁷⁹ and, in

270. Sheldon T. Bradshaw, Note, *Death, Taxes, and Census Litigation: Do the Equal Protection and Apportionment Clauses Guarantee a Constitutional Right to Census Accuracy?*, 64 GEO. WASH. L. REV. 379, 393 (1996).

271. *Kirkpatrick*, 394 U.S. at 530-31.

272. *U.S. Dep’t of Commerce v. Montana*, 503 U.S. 442, 463-64 (1992).

273. *Wisconsin v. City of New York*, 517 U.S. 1, 17 (1996); *Franklin v. Massachusetts*, 505 U.S. 788, 806 (1992).

274. For decades, the Supreme Court declined to enter the political thicket of redistricting. *See, e.g., Colegrove v. Green*, 328 U.S. 549, 556 (1946) (finding that political districting fell beyond judicial power of review). It consistently held that apportionment was a matter of politics and not law. In *Baker v. Carr*, 369 U.S. 186, 200 (1962), though, the Supreme Court did hold that the courts indeed have jurisdiction over redistricting issues.

275. *See, e.g., Karcher v. Daggett*, 462 U.S. 725, 731, 740 (1983) (providing that party challenging population difference between districts must demonstrate that plan “did not come as nearly as practicable to population equality” and, upon such showing, burden shifts to state to “prove that the population deviations in its plan were necessary to achieve some legitimate state objective”); *White v. Weiser*, 412 U.S. 783, 791-92 (1973) (finding that district court was correct in rejecting redistricting plan that was not necessary to achieve state’s asserted justification); *Kirkpatrick*, 394 U.S. at 531 (requiring state to justify population variances when State cannot show good-faith effort in achieving mathematical equality); *Wesberry v. Sanders*, 376 U.S. 1, 8 (1964) (holding that “as nearly as is practicable one man’s vote in a congressional election is to be worth as much as another’s”).

276. 376 U.S. 1 (1964).

277. *Wesberry*, 376 U.S. at 7-8.

278. 377 U.S. 533 (1964).

279. *Reynolds*, 377 U.S. at 575.

Avery v. Midland County,²⁸⁰ the principle of equally weighted votes was extended to local elections.²⁸¹ While the Court has allowed some difference in the weight of the votes at the state and local level, among congressional districts within a particular state, it requires exact mathematical equality. In the Court's own words, states have to "make a good-faith effort to achieve precise mathematical equality"²⁸² when drawing district lines.²⁸³ The Supreme Court confirmed this requirement in *Karcher v. Daggett*,²⁸⁴ when a deviation of less than one percent from population equality was not sustained due to the lack of a proof of a good-faith effort to achieve mathematically exact apportionment.²⁸⁵ Following the Court's precedent, a voting-weight difference of below 0.01% was ruled unconstitutional in 2002.²⁸⁶

While these decisions require "equal representation for equal numbers of people"²⁸⁷ and districts within states to be drawn with "a good-faith effort to achieve precise mathematical equality"²⁸⁸ in order to achieve formal equality of all the voters within the individual states, the Supreme Court could not achieve such equality of the voting weight for voters from different states. After considering all the distribution formulas, the Court held that various constitutional and mathematical constraints make it "virtually impossible"²⁸⁹ to have equipopulous districts in all the states. Although that is true, this Article demonstrates that it is not in fact impossible to give all the people equal voting

280. 390 U.S. 474 (1968).

281. *Avery*, 390 U.S. at 485-86.

282. *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969).

283. In state and local elections, on the other hand, population disparities under ten percent generally require no justification from the state. *See Brown v. Thomson*, 462 U.S. 835, 842 (1983) (noting that total deviations under ten percent are insufficient to make out case of invidious discrimination); *Gaffney v. Cummings*, 412 U.S. 735, 737, 754 (1973) (upholding plan in Connecticut with total deviation of 7.83%).

284. 462 U.S. 725 (1983).

285. *Karcher*, 462 U.S. at 727, 744.

286. *Vieth v. Pennsylvania*, 195 F. Supp. 2d 672, 678 (M.D. Pa. 2002). The largest district had a population of 646,380, and the smallest districts had populations of 646,361. *Vieth v. Pennsylvania*, 188 F. Supp. 2d 532, 535 (M.D. Pa. 2002). The ideal district population was 646,371.26. *Id.* at 535 n.4. The difference between the largest and the smallest district was nineteen people or 0.003%. *Id.* at 535. Plaintiffs proved that the difference was not unavoidable, because all the districts could have populations of 646,371 or 646,372. *See Vieth*, 195 F. Supp. 2d at 675-76 (remarking that witnesses for both parties and defendants themselves recognized plan with zero population deviation).

287. *Kirkpatrick*, 394 U.S. at 530 (quoting *Wesberry v. Sanders*, 376 U.S. 1, 18 (1964)).

288. *Id.* at 530-31. "[T]he 'as nearly as practicable' standard requires that the State make a good-faith effort to achieve precise mathematical equality." *Id.*; *see also Reynolds v. Sims*, 377 U.S. 533, 577 (1964) (finding constitutional requirement that states make honest and good faith effort to make districts as equal as possible). "Unless population variances among congressional districts are shown to have resulted despite such effort, the State must justify each variance, no matter how small." *Kirkpatrick*, 394 U.S. at 531. Article I, Section 2 "permits only the limited population variances which are unavoidable despite a good-faith effort to achieve absolute equality, or for which justification is shown." *Id.* at 531; *accord Karcher*, 462 U.S. at 730 (describing constitutional demand for equality as requiring not precise mathematical equality but as near as possible); *White v. Weiser*, 412 U.S. 783, 790 (1973) (discussing allowance of only unavoidable deviations).

289. *U.S. Dep't of Commerce v. Montana*, 503 U.S. 442, 463 (1992).

weight.

E. Seat-Allocation and Census Cases: The Montana Standard

In 1992, the Supreme Court confronted the question of whether census-based allocation of seats among the states is a justiciable issue and to what extent the “one person, one vote” rule applied to the question. In *Montana*, the state challenged a federal statute governing the method of apportionment of state representatives because it resulted in giving Montana only one congressional seat, although its population was significantly higher than that of the average congressional district in the nation.²⁹⁰ If Congress had chosen Dean’s method instead of Hill’s, Montana would have received a second seat after the 1990 census, and each of those two districts would have been much closer to the ideal one than a single district was.²⁹¹ Montana thus argued that use of Dean’s method would be closer to the ideal proportionality.²⁹²

After reminding us that the constitutional requirement that “[r]epresentatives be chosen ‘by the People of the several States’²⁹³ meant that ‘as nearly as is practicable one man’s vote in a congressional election is to be worth as much as another’s’²⁹⁴ and that states have to “‘make a good-faith effort to achieve precise mathematical equality’²⁹⁵ when they draw the district lines within their borders, the Court went on to consider whether this standard applies also to the apportionment decisions made by Congress:

As we interpreted the constitutional command that Representatives be chosen “by the People of the several States” to require the States to pursue equality in representation, we might well find that the requirement that Representatives be apportioned among the several States “according to their respective Numbers” would also embody the same principle of equality.²⁹⁶

According to this passage, it seemed highly probable that the Court was about to bind Congress by the rigid equality principle when seats are apportioned among the states. Nevertheless, the constitutional requirements of state-border preservation and equal representation are, if each representative is to have one vote, simply not compatible. Thus, the Supreme Court faced the same dilemma that had tormented political thinkers for centuries. If there is a fixed number of seats and a fixed number of states with various populations, there is no way to apportion the seats among the states exactly in proportion to

290. *Montana*, 503 U.S. at 445-46.

291. *Id.* at 442-43. The ideal district’s population was 572,466. *See id.* at 445 (recognizing average size of congressional districts nationwide is 572,466). Hill’s method allocated Montana, with a population of 803,655, a single seat—231,189 above the ideal. *Id.* If Montana received two seats with 401,827 people, each seat would deviate from the ideal size by only 170,638. *Id.*

292. *Montana*, 503 U.S. at 446.

293. *Id.* at 459-60 (quoting U.S. Const. art. I, § 2, cl. 1).

294. *Id.* at 459-60 (quoting *Wesberry v. Sanders*, 376 U.S. 1, 7-8 (1964)).

295. *Id.* at 460 (quoting *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969)).

296. *Id.* at 461.

their populations. There are various methods available, but none of them is even close to the ideal. Moreover, there is no agreement among commentators as to which method is closest to the ideal proportionality.²⁹⁷ The Supreme Court recognized that the “one man, one vote” principle is a “much easier task”²⁹⁸ to meet in the case of intrastate redistricting, but interstate seat apportionment, where various methods can be declared closest to the ideal depending on the criteria used,²⁹⁹ is something completely different:

In cases involving variances within a State, changes in the absolute differences from the ideal produce parallel changes in the relative differences. Within a State, there is no theoretical incompatibility entailed in minimizing both the absolute and the relative differences. In this case, in contrast, the reduction in the absolute difference

297. Up to the 1980s, the experts argued most often about which method was closer to the ideal proportionality. There were several different disproportionality indexes introduced (the most important ones are Rae, 1971; Loosemore-Hanby, 1971; Rose, 1984; Lijphart, 1985). DOUGLAS W. RAE, *THE POLITICAL CONSEQUENCES OF ELECTORAL LAWS* 133-47 (1971); Richard Rose, *Electoral Systems: A Question of Degree or of Principle?*, in *CHOOSING AN ELECTORAL SYSTEM: ISSUES AND ALTERNATIVES* 73 (Arend Lijphart & Bernard Grofman eds., 1984); Arend Lijphart, *The Field of Electoral Systems Research: A Critical Survey*, 4 *ELECTORAL STUD.* 3 (1985); John Loosemore & Victor J. Hanby, *The Theoretical Limits of Maximum Distortion: Some Analytic Expressions for Electoral Systems*, *BRIT. J. POL. SCI.* 1, 467-77 (1971). In the 1980s and 1990s, authors discovered that different methods should not be seen as being more or less proportional relative to each other, because each of them generates its own index of proportionality and, thus, its own way of measuring disproportionality. Consequently, each method can be viewed as closest to the ideal if its corresponding index of proportionality is used. Nevertheless, analysis of proportionality is still the subject of open and often controversial debate. See BALINSKI & YOUNG, *supra* note 13, at 87-93 (describing various apportionment systems and stating that choice of system depends on political, social, and legal heritage); STEVEN J. BRAMS & ALAN D. TAYLOR, *FAIR DIVISION: FROM CAKE-CUTTING TO DISPUTE RESOLUTION* 204-30 (1996) (describing benefits and vulnerabilities of four possible voting systems); MICHAEL I. MEYERSON, *POLITICAL NUMERACY: MATHEMATICAL PERSPECTIVES ON OUR CHAOTIC CONSTITUTION* 48-70 (2002) (discussing theory that no one system can produce rational and completely democratic result); RAE, *supra*, at 133-47 (discussing various propositions about electoral laws and short- and long-term consequences of different methods); H. PEYTON YOUNG, *EQUITY IN THEORY AND PRACTICE* 43-44 (1995) (describing vigorous apportionment debates since Constitutional Convention in 1787); Rose, *supra*, at 81 (discussing variety of unknown consequences of changing electoral system); Chafee, *supra* note 15, at 1020-44 (describing costs and benefits of various methods of apportionment); Edelman & Sherry, *supra* note 25, at 211-22 (discussing various apportionment methods as applied to 2000 census figures to determine which may be more satisfactory); Gallagher, *supra* note 75, at 38-45 (discussing disproportionality in various apportionment measures); Lijphart, *supra*, at 10-11 (suggesting three alternatives to determining which measure of proportionality to use); Burt L. Monroe, *Disproportionality and Malapportionment: Measuring Electoral Inequity*, 13 *ELECTORAL STUD.* 132, 146 (1994) (discussing lack of clarity in determining distributional standards and choice of which deviations are important); Aline Pennisi, *Disproportionality Indexes and Robustness of Proportional Allocation Methods*, 17 *ELECTORAL STUD.* 3, 17-18 (1998) (finding two proportionality methods to be most robust, but advising that careful analysis of any proportionality method is necessary).

298. *Montana*, 503 U.S. at 464.

299. See Gallagher, *supra* note 75, at 43-45 (discussing various outcomes based on additional disproportionality factors). The author presents five different proportionality formulas and five different disproportionality measurement indices and shows that each formula can be viewed as closest to the ideal proportionality, depending on the criteria used.

between the size of Montana's district and the size of the ideal district has the effect of increasing the variance in the *relative* difference between the ideal and the size of the districts in both Montana and Washington. Moreover, whereas reductions in the variances among districts within a given State bring all of the affected districts closer to the ideal, in this case a change that would bring Montana closer to the ideal pushes the Washington districts away from that ideal.

What is the better measure of inequality—absolute difference in district size, absolute difference in share of a Representative, or relative difference in district size or share? Neither mathematical analysis nor constitutional interpretation provides a conclusive answer. In none of these alternative measures of inequality do we find a substantive principle of commanding constitutional significance. The polestar of equal representation does not provide sufficient guidance to allow us to discern a single constitutionally permissible course.

....

. . . [T]he need to allocate a fixed number of indivisible Representatives among 50 States of varying populations makes it virtually impossible to have the same size district in any pair of States, let alone in all 50. Accordingly, although “common sense” supports a test requiring “a good-faith effort to achieve *precise* mathematical equality” *within* each State, the constraints imposed by Article I, § 2, itself make that goal illusory for the Nation as a whole.³⁰⁰

Thus, the Court tried to apply the requirement of precise mathematical equality to the distribution of seats among the states but was unable to do so because the Constitution itself contains constraints that make such distribution mathematically impossible.³⁰¹ Moreover, there are no criteria available under which one could choose the best districting plan among several different ones. The Court recognized that Congress's choice of apportionment method is not “capable of being reviewed under a relatively rigid mathematical standard”³⁰² similar to the standard used for intrastate district plans. With these findings taken into account, the Court could not rule that Congress's choice of Hill's method was unconstitutional.³⁰³ It concluded that Congress's “apparently good-faith choice of a method . . . commands far more deference than”³⁰⁴ the state's districting decision. By taking into account the fact that the decision to adopt Hill's method was made “after decades of experience, experimentation, and debate,”³⁰⁵ that it was supported by independent scholars,³⁰⁶ and that “[f]or a

300. *Montana*, 503 U.S. at 461-63 (second emphasis added) (citation and footnotes omitted) (quoting *Kirkpatrick*, 394 U.S. at 530-31).

301. *See id.* at 447-48 (recognizing that constitutional requirement to indivisibly allocate representatives among states leads to impossibility of equally sized districts).

302. *See id.* at 464 (recognizing good-faith choice of method deserves more respect than mathematical equality).

303. *Id.* at 466.

304. *Id.* at 464.

305. *Montana*, 503 U.S. at 465.

306. *See id.* (noting that scholars support basic decision to use regular procedure of

half century the results of that method have been accepted by the States and the Nation,"³⁰⁷ the Court concluded that Congress "had ample power"³⁰⁸ to enact Hill's method in 1941 legislation and apply it after the 1990 census.³⁰⁹

The Court refined the standard of review established in *Montana* in *Franklin v. Massachusetts*³¹⁰ and *Wisconsin v. City of New York*.³¹¹ In the latter decision, the Court summarized the findings of the *Montana* case and described the review used in the three cases.³¹² This summary is of considerable importance for us, not only because it clarifies the standard used in seat-allocation cases, but also because the *Montana* reasoning as described in *Wisconsin* does not appear to be fully consistent with the actual *Montana* reasoning. When describing the *Montana* decision, the Court in *Wisconsin v. City of New York* stated:

[W]e noted that the *Wesberry* line of cases all involved intrastate disparities in the population of voting districts that had resulted from a State's redistricting decisions, whereas *Montana* had challenged interstate disparities resulting from the actions of Congress.

. . . Finding that *Montana* demanded that we choose between several measures of inequality in order to hold the *Wesberry* standard applicable to congressional apportionment decisions, we concluded that "[n]either mathematical analysis nor constitutional interpretation provide[d] a conclusive answer" upon which to base that choice.

We further . . . reemphasized that Congress' "good-faith choice of a method of apportionment of Representatives among the several States 'according to their respective Numbers' commands far more deference than a state districting decision that is capable of being reviewed under a relatively rigid mathematical standard."³¹³

The explanation of *Montana* in the *Wisconsin* decision four years later appears inconsistent with the actual text of the *Montana* decision. In *Montana*, the Court came to the conclusion that it could not apply the *Wesberry* standard because of the three constitutional requirements constraining the possibility of distributing representatives among the States "according to their respective

apportionment and particular method of equal proportions).

307. *Id.* at 465-66.

308. *Id.* at 466.

309. *Id.*

310. 505 U.S. 788 (1992). In this case, decided only three months after *Montana*, the Court reviewed the constitutionality of the government's method for allocating the overseas military personnel to the states for reapportionment purposes. *Franklin*, 505 U.S. at 790-91. Massachusetts argued that the method used resulted in the state losing one seat in the House of Representatives. *Id.* The Court held that the Secretary's allocation of overseas federal employees to their home states is consistent with the constitutional language and the goal of equal representation. *Id.* at 806.

311. 517 U.S. 1 (1996). In this case, the Supreme Court reviewed the Secretary of Commerce's decision not to use a postenumeration statistical adjustment that sought to remedy an undercount in the census enumeration. *Wisconsin*, 517 U.S. at 4-5. The Court ruled that "the Secretary's decision was well within the constitutional bounds of discretion." *Id.* at 24.

312. *Id.* at 13-20.

313. *Id.* at 14-15 (quoting *Montana*, 503 U.S. at 463-64).

Numbers”³¹⁴ with “a good-faith effort to achieve precise mathematical equality.”³¹⁵ When one reads the *Montana* decision, one receives a clear impression that the Court would require Congress to apply the *Wesberry* standard if it were mathematically possible. If this were not the case, “[w]hat sense [would] it make to insist that all 22 districts in Illinois must be mathematically equal with each other, while all of them are 7.3% more populous than all six districts in Colorado and 4.4% less populous than all nine districts in Missouri?”³¹⁶ But, in *Wisconsin*, the Court explained that its decision not to apply the *Wesberry* standard to apportionment originated in the Constitution, which “vests Congress with wide discretion over apportionment decisions.”³¹⁷ Further explaining the *Montana* decision, the Court in *Wisconsin* again mentions that the *Wesberry* standard does not apply to Congress because “Congress was due more deference than the States in this area.”³¹⁸ But then, the Court once again admits that the reason for upholding the present apportionment method was the lack of an apportionment method that would minimize both the absolute and relative differences among the district population:

Wesberry required a State to make “a good-faith effort to achieve precise mathematical equality” in the size of voting districts. While this standard could be applied easily to intrastate districting because there was no “theoretical incompatibility entailed in minimizing both the absolute and the relative differences” in the sizes of particular voting districts, we observed that it was not so easily applied to interstate districting decisions where there was a direct tradeoff between absolute and relative differences in size. Finding that *Montana* demanded that we choose between several measures of inequality in order to hold the *Wesberry* standard applicable to congressional apportionment decisions, we concluded that “[n]either mathematical analysis nor constitutional interpretation provide[d] a conclusive answer” upon which to base that choice.³¹⁹

Then, the Court reminded us that the “Constitution itself, by guaranteeing a minimum of one representative for each State, made it virtually impossible in interstate apportionment to achieve the standard imposed by *Wesberry*”³²⁰ and repeated that it “reemphasized that Congress’ ‘good-faith choice of a method of apportionment of Representatives among the several States “according to their respective Numbers” commands far more deference than a state districting decision that is capable of being reviewed under a relatively rigid mathematical

314. *Montana*, 503 U.S. at 464 (internal quotation marks omitted).

315. *Id.* at 463 (internal quotation marks omitted) (quoting *Kirkpatrick v. Preisler*, 394 U.S. 526, 530-31 (1969)).

316. Gordon E. Baker, *Whatever Happened to the Reapportionment Revolution in the United States?*, in *ELECTORAL LAWS AND THEIR POLITICAL CONSEQUENCES 257, 275* (Bernard Grofman & Arend Lijphart eds., 3d prtg. 2003).

317. *Wisconsin*, 517 U.S. at 15.

318. *Id.* at 14.

319. *Id.* (citations omitted) (quoting *Montana*, 503 U.S. at 461, 463; *Kirkpatrick*, 394 U.S. at 530-31).

320. *Id.* at 14-15.

standard.”³²¹

Then, however, when comparing *Wisconsin*'s census issue with *Montana*'s seat allocation issue, the Court gave no sign that mathematics prevented it from applying the *Wesberry* standard to the *Montana* seat-allocation analysis:

In *Montana*, we held that Congress' "apparently good-faith choice of a method of apportionment of Representatives among the several States 'according to their respective Numbers'" was not subject to strict scrutiny under *Wesberry*. With that conclusion in mind, it is difficult to see why or how *Wesberry* would apply to the Federal Government's conduct of the census—a context even further removed from intrastate districting than is congressional apportionment.³²²

The *Wisconsin* Court oscillated between hints that the reasons for its decisions in *Montana* and *Franklin* were either the "theoretical incompatibility entailed in minimizing both the absolute and the relative differences"³²³ or, alternatively, the Constitution, which "vests Congress with wide discretion over apportionment decisions."³²⁴ It might be claimed that the reason for giving discretion to Congress was the theoretical impossibility of the optimal apportionment method, but that is not how the Court put it, especially not in *Wisconsin*, when it described its *Franklin* decision as based on the Constitution, which "vests Congress with wide discretion over apportionment decisions."³²⁵ It might be that the Court used the *Montana* and *Franklin* decisions and adjusted the reasoning of those decisions in order to strengthen the *Wisconsin* reasoning.³²⁶

Despite this confusion with the reasoning, the Court in *Wisconsin* clarified the standard of review in census cases. As it once again restated the standard established by *Montana* and articulated in *Franklin*, the *Wisconsin* Court had to examine whether the apportionment method used was "consistent with the constitutional language and the constitutional goal of equal representation."³²⁷ According to the *Wisconsin* Court, the essence of the standard is to find out whether the plaintiff has met his "burden of proving that a decision contrary to that made . . . would 'make representation . . . more equal.'"³²⁸

321. *Id.* at 15 (quoting *Montana*, 503 U.S. at 464).

322. *Wisconsin*, 517 U.S. at 18 (citation omitted) (quoting *Montana*, 503 U.S. at 464).

323. *Id.* at 14 (quoting *Montana*, 503 U.S. at 461).

324. *Id.* at 15.

325. *Id.*

326. Such a "use" of previous decisions to strengthen the Court's reasoning is not a novelty. The landmark decision *Gray v. Sanders*, 372 U.S. 368 (1963), was criticized for stating that similar reasoning "underlies many of our decisions" but relying on a series of cases that had nothing to do with the issue of the case in question. HASEN, *supra* note 7, at 21 (quoting *Gray*, 372 U.S. at 380). As Hasen shows, none of the cases *Gray* relied on dealt with voting strength and "[t]he Court majority simply made up this political equality rule out of whole cloth." *Id.* at 21-22.

327. *Wisconsin*, 517 U.S. at 15 (quoting *Franklin v. Massachusetts*, 505 U.S. 788, 804 (1992)).

328. *Id.* (second omission in original) (quoting *Franklin*, 505 U.S. at 806). Actually, the *Montana* decision never used the "make representation . . . more equal" phrase. While defining the *Montana* standard, *Franklin* adopted the "make representation . . . more equal" phrase. *Franklin*, 505 U.S. at 806. *Wisconsin* then, when explaining the *Montana* standard, again used these words, which do not

F. *Whichever Standard, Same Result*

If the presently used, one-representative-one-vote model as implied in the Rules of the House were to be challenged in court by a plaintiff proposing the one-person-one-vote model, how would it fare in terms of constitutionality? If the Court would apply the same level of scrutiny it applied to all the other cases involving voting weight, the current model would likely be found unconstitutional. As we have seen, under the current model, the share of the total House representation held by the voters varies a good deal.³²⁹ Regardless of the Constitution's "each State shall have at Least one Representative"³³⁰ provision, voting weight varies, depending on the decade, up to 100%.³³¹ In the decade following the 2000 census, a vote in Rhode Island weighs 69% more than a vote in Montana.³³² Currently, representatives of only 48.77% of the national population hold a majority of House seats.³³³ Representatives of the popular majority, on the other hand, can likely be outvoted by the representatives of the popular minority. If the Rules of the House were changed as proposed, none of this could happen. Each vote would have an exactly equal share of the total House representation. Representatives of the 48.77% of the population would only hold 48.77% of the House. Representatives of the popular majority would never be outvoted by the representatives of the popular minority. There would be absolutely no deviation from the "one person, one vote" principle, because the representative of 600,000 people would have 600,000 votes and the representative of 900,000 people would have 900,000 votes.

In case the Court would, for whatever reason, apply the *Montana* standard to the case, the plaintiff would need to introduce a new model and prove that use of this model would make representation more equal. In *Montana*, the Court also gave a hint as to what *making representation more equal* might mean. It tested Hill's method by comparing it to Dean's method.³³⁴ It noted that Hill's method brings Washington closer to the ideal representation but pushes Montana away; Dean's method, on the contrary, brings Montana closer but pushes Washington away.³³⁵ It also noted that there are various measures of inequality and that minimization of inequality according to one measure results in an increase of inequality according to another measure.³³⁶ As the Court could

appear anywhere in the *Montana* decision. See *Wisconsin*, 517 U.S. at 15 (using "make representation . . . more equal" language and attributing it to *Franklin* decision).

329. See *supra* Table 1 for a demonstration of each citizen's current share of representation in the House.

330. U.S. CONST. art. I, § 2, cl. 3.

331. See *supra* notes 2-6 and accompanying text for a description of the variation of voting weight of the citizens of various states.

332. See U.S. CENSUS BUREAU, *supra* note 2 (demonstrating that, while Rhode Island has population of 1,049,662 and holds two House seats, Montana has population of 905,316 and holds only one seat).

333. See *id.* (providing data to show that 48.77% of total U.S. population holds 218 House seats).

334. U.S. Dep't of Commerce v. *Montana*, 503 U.S. 442, 460-61 (1992).

335. *Id.* at 460-62.

336. *Id.*

not “find a substantive principle of commanding constitutional significance”³³⁷ in any of the four alternative measures of inequality,³³⁸ it was unable to determine which one was more important than the others.³³⁹ The meaning of *making representation more equal* can therefore be extracted from the decision. A model that would minimize at least one of the measures of inequality and not increase the others would *make representation more equal*.

Applying this standard to the current apportionment system in the United States, the plaintiff would have to prove that the newly proposed model would make representation more equal than the presently used model. The plaintiff would do this by showing that the new model can be proven to minimize at least some of the competing measures of inequality without increasing the others. The one-person-one-vote model does not try to squeeze the representation of all the American voters into 435 equally strong representatives. As an alternative, it suggests that each of the 435 representatives under this model have a number of votes proportional to the share of the national population he represents. The actual number of the individuals representing a given state by sitting in Congress would not change. Their power, however, would. It would become proportional to that state’s population. Taking into consideration various measures of inequality, this Article can conclude that the proposed method does not increase inequality according to any of them. On the other hand, it achieves exact mathematical equality in some of them. Under this model, each voter gets an exactly equal share of the Congress, and states get decision-making representation exactly “according to their respective Numbers.”³⁴⁰

As this Article has shown, whichever of the two standards would be used, there is a high probability that the present voting provision of the Rules of the House would be found unconstitutional. In any event, there are several reasons why the challenge to the current apportionment system would more closely comply to the “a good-faith effort to achieve precise mathematical equality” standard than to the *Montana* standard. The standard applied in cases involving voting weight is clearly described in the following passage:

The level of scrutiny given governmental action also depends in “part on the nature of the affected right.” A government program that “impinges on the exercise of a fundamental personal right” must be “precisely tailored to serve a compelling governmental interest.” This means that the standard of review is strict scrutiny.

. . . [T]he Supreme Court, in its apportionment line of cases, has held that the right to have your vote weighted the same as other votes is a fundamental right.

Unlike traditional equal protection analysis, the apportionment line

337. *Id.* at 463.

338. The *Montana* Court mentioned (a) “absolute difference in district size,” (b) “absolute difference in share of a Representative,” (c) “relative difference in district size,” and (d) “relative difference in district . . . share” of a Representative. *Id.*

339. *Montana*, 503 U.S. at 463 (noting that there is no conclusive answer as to what is best measure of inequality).

340. U.S. CONST. art. I, § 2, cl. 3, *amended by id.* amend. XIV, § 2.

of cases does not require that the plaintiff prove intentional discrimination. The rationale for this is that apportionment

cases vindicate a right that the Supreme Court has found to be implicit in the Constitution to an apportionment mechanism that will . . . give each person's vote the same weight in an election. A state's failure to create the required mechanism is an intentional denial of the right to an equally weighted vote.

The plaintiff's only burden of proof under the apportionment line of cases is to show that the government did not make a good-faith effort to draw districts that are as nearly equal in population as is possible. Once a plaintiff has made this showing, the burden of proof shifts to the government to prove that the action is "necessary to achieve some legitimate state objective."³⁴¹

As previously shown, when equal voting weight was in question, the Court invariably used strict scrutiny.³⁴² Because the present situation clearly involves the equal voting weight issue, it is reasonable to assume that strict scrutiny would apply in the current apportionment scheme, too. Additionally, the voting-weight cases in which the Court applied strict scrutiny and cases in which it decided to use a less strict standard differ in another respect. The cases based on the Equal Protection Clause used a highly strict level of review.³⁴³ In the cases based on the Census Clause and the Apportionment Clause, the *Montana* standard applied.³⁴⁴ The case introduced by this Article would be brought forward as an equal protection challenge. Moreover, the Court itself used the phrase "conduct of the census" cases to describe *Montana*, *Franklin*, and *Wisconsin*.³⁴⁵ This case would no more be a "conduct of the census" case than *Baker* or *Wesberry*.³⁴⁶

There are several additional reasons speaking in favor of the application of the more onerous standard. For instance, the Court applied the *Montana*

341. Bradshaw, *supra* note 270, at 393-94 (footnotes omitted) (omission in original) (quoting Tucker v. U.S. Dep't of Commerce, 958 F.2d 1411, 1414 (7th Cir. 1992)).

342. See *supra* Parts IV.C-D for a discussion of the standard of review in equal voting weight cases.

343. See, e.g., Reynolds v. Sims, 377 U.S. 533, 561-62 (1964) ("[S]ince the right to exercise the franchise in a free and unimpaired manner is preservative of other basic civil and political rights, any alleged infringement of the right of citizens to vote must be carefully and meticulously scrutinized.").

344. E.g., Wisconsin v. City of New York, 517 U.S. 1, 17 (1996) (applying *Montana* standard in Census Clause context); Franklin v. Massachusetts, 505 U.S. 788, 804 (1992) (applying *Montana* standard in Apportionment Clause context).

345. The Court began its description of the *Montana* and *Franklin* decisions with the words: "In recent years, we have twice considered constitutional challenges to the *conduct of the census*." *Wisconsin*, 517 U.S. at 13 (emphasis added).

346. If the here-proposed challenge to the Rules of the House were considered a census case, then almost any case could be considered as such.

The data collected by the census are used in reapportioning the House of Representatives, in determining the allocation of electoral votes to the states for the election of the president, by the states to draw boundaries for congressional and state legislative districts, by local governments to establish districts for other representative bodies, and to allocate approximately \$39 billion in government funds.

Bradshaw, *supra* note 270, at 379-80 (footnotes omitted).

standard in the cases in which there existed several competing notions of voting-weight equality and the Court could not decide which of them was the accurate one:

[The Court's] deference to Congress's adoption of the method of equal proportions was based not on some broad notion of unfettered discretion, but on the specific point that the constitution itself did not dictate a choice among the "alternative measures of inequality" that pointed to competing rules for apportionment. In other words, the Court explained that the choice among these competing rules was a choice among methods that all bore a "reasonable relationship" to the standards set forth in the Constitution. There was no "single constitutionally permissible course," and thus Congress was certainly within its authority in choosing among them.³⁴⁷

The apportionment challenge outlined in this Article, on the other hand, is not one of competing notions of voting-weight equalities. It is probably impossible to make a case for the voting weight being more equal under the current model than it would be under the proposed model.

One of the possible objections to the application of strict scrutiny to the challenge of Rules of the House might be that, in voting-weight cases, strict scrutiny so far has applied only to the states and that this does not mean it should be applied to Congress. This argument, however, is ill founded. What sense would it make to require the states to achieve a precise equal voting weight for voters within the states if, subsequently, Congress had the power to change the weight of different votes and make them unequal? And, on the other hand, what sense would it make to allow Congress first to make the conditions that make equal voting weight impossible and then impose rules on the states in an attempt to equalize these inequalities created by Congress? There are two separate authorities taking part in the formation of the congressional election law—Congress and the states. If one of them were allowed to unbalance the equity of the voting weight, the other could not correct that imbalance. If the Constitution requires equal voting weight, it is therefore the only reasonable interpretation that neither Congress nor the states should be allowed to distort this equality and that an equal level of scrutiny applies to both.

Thus far, this Article has only discussed what is likely to happen if the two standards would be applied to the case presented. A quite different question, however, is whether the Court *should* protect political equality to such an extent, or whether it should leave it up to Congress to decide how strictly the principle of equal voting weight should be applied. Hasen, for example, argues that the Court should not become too minimalist.³⁴⁸ He distinguishes two kinds of equal voting weight cases—the ones at the core of the political-equality principle and

347. Thomas R. Lee & Lara J. Wolfson, *The Census and the Overseas Population*, 2 ELECTION L.J. 343, 365-66 (2003) (footnotes omitted) (quoting *U.S. Dep't of Commerce v. Montana*, 503 U.S. 442, 463 (1992)).

348. See HASEN, *supra* note 7, at 74-79 (arguing that Court should play central role in protecting core equality principles).

those so-called contested-political-equality principles.³⁴⁹ While it is the “Court’s role to protect the core,” he claims, “the Court should not constitutionalize *contested* political equality principles.”³⁵⁰ Hasen defines the core of the political-equality principle in regard to the matter of equal voting weight as “[v]oters hav[ing] the right to have their votes . . . weighed roughly equally to the votes of other voters.”³⁵¹ Understandably, he does not define the precise limits of the *roughly* equally weighted votes. Although he expresses some ambivalence about the “one person, one vote” principle being at the core of the essential political-rights principle at the time the Supreme Court decided *Reynolds*, Hasen says that the principle is now “part of conventional thinking about the requirements of a good democracy.”³⁵² Requiring strict mathematical equality, however, does not fall at the core of the political-equality principle.³⁵³

Even with such a noninterventionalist approach (although one not taken by the Court), the proposed model falls within the core of political equality under Hasen’s definition. In choosing between the present model and the one proposed in this Article, the Court would be deciding between either requiring equal voting weight or allowing discrepancies of up to 100%. There would be no middle way available. Because disparities of eighty percent and more, especially when they may be remedied, fall outside the “conventional thinking about the requirements of a good democracy,” the one-person-one-vote model might well address the core of the political-equality principle.

CONCLUSIONS

If the Rules of the House of Representatives contained a provision holding that Republican members have two votes while Democrats have only one, there would be no question about the unconstitutionality of such a provision. That situation is certainly analogous to one in which representatives from the West had more votes than those from the East. Few are likely to find any situation in which representatives of equal numbers of people have different numbers of votes to be particularly democratic. What about members representing different numbers of people having equal votes?

By various provisions, the Constitution sets several requirements on representation, including the allocation of House seats to the states according to their populations;³⁵⁴ fair representation of the states according to their

349. *Id.* at 73-81.

350. *Id.* at 74.

351. *Id.* at 82.

352. *Id.* at 82-83.

353. E-mail from Richard Hasen, William H. Hannon Distinguished Professor of Law, Loyola Law School Los Angeles, to Jurij Toplak, Assistant Professor of Law, University of Maribor (Mar. 17, 2004) (on file with author) (“I think *Reynolds* is in the core now, but I express some ambivalence about it at the time *Reynolds* was decided. Certainly I don’t think courts should push for strict mathematical equality.”).

354. U.S. CONST. art. I, § 2, cl. 3.

populations;³⁵⁵ and equal voting weight and equal representation of all people.³⁵⁶ Some believe that none of these principles can be fully realized because of constitutional constraints and mathematical incompatibilities. For this reason, voting weight of the House voters varies by over eighty percent, with some states are overrepresented while others remain underrepresented.

This Article has shown that these constitutional principles are not fully realized only because they have been treated as a whole, with attempts to apply simultaneous remedies to all of them. In fact, constitutional as well as theoretical constraints prevent only the full realization of the first requirement—allocation of 435 seats to the states exactly according to their populations. All the other principles can be easily realized to the fullest extent.

This Article has shown that there is no validity to the objection that the constitutional provision that regulates seat allocation does not permit all votes to have equal voting weight. Instead of first allocating the seats, then assigning each representative one vote and, at the end, trying to achieve equal voting weight, this Article has proceeded from the opposite direction. It began by treating equal voting weight as a given, then allocating the seats, then assigning the representatives the power that would keep representation and voting weight perfectly equal.

Consequently, nothing must be changed except the strength of each member in the House of Representatives. This Article proposes that each member has a number of votes equal to the number of people he represents. The representatives of 600,000 people would have 600,000 votes, while the representative of 900,000 people would have 900,000 votes. In this way, equal representation for equal numbers of people would be achieved. Because the people's voting weight would become equal while their representatives' voting weight would not, this Article named the proposed model the one-person-one-vote model and the currently used model the one-representative-one-vote model. Most importantly, the introduction of the described model does not require any changes in the Constitution, election law, or district boundaries. All that must change is a provision in the Rules of the House of Representatives.

There are at least five strong reasons in favor of adopting the proposed model:

- No individual and no state in the United States will again be overrepresented or underrepresented.
- It will never happen again that the elected representatives of a majority of the population do not hold a majority of the House. Whichever combination of representatives is considered, a majority of people will always hold a majority of representation.
- The degree of representation of a state or any voter group will not be subject to a choice of method or to partisan (or other) interests.
- Equality of people is a basic foundation of democratic rule. Equality of representatives is not.

355. *Id.* amend. XIV, § 2.

356. *Id.* amend. XIV, § 1.

- “One person, one vote” is our constitutional principle, while the Constitution does not require each member of the House to have one vote.

The reason, therefore, for the current inability to achieve equal voting weight consists entirely in each of the House members having one vote. Under the Constitution, equality of voters and equality of representatives are simply not compatible. Although it may seem desirable to keep both, that is impossible. A decision must be made as to which one to observe strictly and which one to approximate. We can either decide to hold onto the rule we are used to or hold onto the one that lies at the foundation of democratic rule.

One might reject the equal voting weight model as imaginary, unworkable, impracticable, defective, or unconstitutional. But like many other heuristic models, it can be subject to countless improvements and variations and serve as a source of ideas to improve the current system. As this Article has shown, however, it is, in fact, quite realizable. Whether it can, or even must, be applied to the House of Representatives is to be decided by scholars, politicians, and, above all, courts. Nevertheless, Congress is by no means the only representative body to which the model could be applied. Potential users include the enormous number of state and local bodies within the United States, let alone the elected bodies in the rest of the world.

