# SAMUEL MERRILL, III

10-2023

## **Curriculum Vitae and List of Publications**

#### **EDUCATION:**

Ph.D.	Yale University	1965	Mathematics
M.S.	Pennsylvania State University	1980	Statistics
M.A.	Yale University	1963	Mathematics
B.A.	<b>Tulane University</b>	1961	Mathematics

#### PROFESSIONAL EMPLOYMENT:

Wilkes University, Department of Mathematics and Computer Science: 1973-present. Current rank: Professor Emeritus. Chair of the Department 1988-90.

**University of Washington, Seattle**, Department of Biostatistics, Visiting Scholar: sabbatical, 1994-95.

**Yale University School of Medicine**, Division of Biostatistics, Dept. of Epidemiology and Public Health, Visiting Professor (statistical consulting unit): sabbatical, 1986-87.

University of Rochester, Department of Mathematics, Instructor/Asst. Professor: 1965-73.

### **RESEARCH**:

**Mathematical modeling in political science** (spatial models, competitive equilibria, elections and voting behavior, and voting systems) using probability, statistics, game theory, optimization, Fourier series, computer simulation.

Biostatistical analysis (clinical trials)

### **PUBLICATIONS:**

- 4 books on political science, one published by Princeton University Press (1988), two by Cambridge University Press (1999; 2005), and one by Oxford University Press (2024)
- 71 research articles in national and international refereed journals
- 7 expository articles

AWARD: Jack L. Walker Outstanding Article Award, Organized Section on Political Organizations and Parties, American Political Science Association, 2008.

# SAMUEL MERRILL, III

### **Publications**

## BOOKS

- 1. Samuel Merrill, III. <u>Making Multicandidate Elections More Democratic</u>. 1988. Princeton: Princeton University Press.
- 2. Samuel Merrill, III, and Bernard Grofman. 1999. <u>A Unified Theory of Voting: Directional and Proximity Spatial Models</u>. Cambridge, England: Cambridge University Press.
- 3. James Adams, Samuel Merrill, III, and Bernard Grofman. 2005. <u>A Unified Theory of Party Competition: A Cross-National Analysis Integrating Spatial and Behavioral Factors</u>. Cambridge, England: Cambridge University Press.
- 4. Samuel Merrill, III, Bernard Grofman, and Thomas L. Brunell. 2024. <u>How Polarization Begets Polarization: Ideological Extremism in the US Congress</u>. New York: Oxford University Press.

### RESEARCH PUBLICATIONS

- 1. Samuel Merrill, III. Analytic embedding and mean square approximation, <u>Proc. Amer. Math.</u> Soc. 18 (1967), 836-842.
- 2. Samuel Merrill, III. Maximality of certain algebras H<sup>∞</sup>(dm), Math. Zeitschrift 106 (1968), 261-266.
- 3. Samuel Merrill, III and Nand Lal. Characterization of certain invariant subspaces of Hp and Lp spaces derived from logmodular algebras, <u>Pacific J. Math.</u> 30 (1969), 463-474.
- 4. Nand Lal and Samuel Merrill, III. Isometries of H<sup>p</sup> spaces of the torus, <u>Proc. Amer. Math. Soc.</u> 30 (1972), 465-471.
- 5. Samuel Merrill, III. Gleason parts and a problem in prediction theory, <u>Math. Zeitschrift</u> 129 (1972), 321-329.
- 6. Samuel Merrill, III. Citizen voting power under the Electoral College: A stochastic model based on state voting patterns, S.I.A.M. J. on Applied Math. 34 (1978), 376-390.
- 7. Samuel Merrill, III. Empirical estimates for the likelihood of a divided verdict in a Presidential election, Public Choice 33, #2 (1978), 127-133.
- 8. Samuel Merrill, III. Approval voting: A 'best buy' method for multi-candidate elections, <u>Math. Magazine</u> 52, #2 (1979), 98-102.
- 9. Samuel Merrill, III. Strategic decisions under one-stage multi-candidate voting systems, <u>Public Choice</u> 36, #1 (1981), 115-134.

- Samuel Merrill, III. Strategic decisions for multicandidate voting systems under uncertainty and under risk, in M. Holler, ed., <u>Power, Voting, and Voting Power</u>, pp. 179-187. Wurzburg: Physica-Verlag (1982).
- 11. Samuel Merrill, III. Approximations to the Banzhaf index of voting power, <u>Math. Monthly</u> 89 (1982), 108-110.
- 12. Samuel Merrill, III and Albert Guber. A statistical model for foraminiferal paleobathymetry, with application to the middle Miocene of the Hokuroku district, Japan, <u>J. of Math. Geology</u> 14 (1982), 607-627.
- 13. Steven J. Brams and Samuel Merrill, III. Equilibrium strategies for final-offer arbitration: There is no median convergence, <u>Management Science</u> 29 (1983), 927-941.
- 14. Albert Guber and Samuel Merrill, III. Paleo-oceanographic and biostratigraphic significance of the foraminifera from the Hokuroku district, Japan, <u>J. Economic Geology</u>: Monograph # 5 (1983), 55-70.
- 15. Samuel Merrill, III. A comparison of efficiency of multicandidate electoral systems, <u>Amer. J.</u> Political Science 28 (1984), 23-48.
- 16. Samuel Merrill, III. A statistical model for Condorcet efficiency using simulation under spatial model assumptions, <u>Public Choice</u> 47 (1985), 389-403.
- 17. Steven J. Brams and Samuel Merrill, III. Response to Rabow, <u>Management Science</u> 31 (1985), 375-376.
- 18. Steven J. Brams and Samuel Merrill, III. Binding versus final-offer arbitration: A combination is best, <u>Management Science</u> 32 (1986), 1346-1355.
- 19. Samuel Merrill, III and Jack Nagel. The effect of approval balloting on strategic voting under alternative decision rules, American Political Science Review (1987), 509-524.
- 20. Steven J. Brams, Peter C. Fishburn, and Samuel Merrill, III. The responsiveness of approval voting: Comments on Saari and Van Newenhizen, <u>Public Choice</u> 59 (1988), 121-131.
- Israel Goldstein, Roberto Romero, Samuel Merrill, III, Macor Wan, Theresa O'Connor, Moshe Mazor, and John Hobbins. Fetal body and breathing movements as predictors of intraamniotic infection in preterm premature rupture of membranes, <u>American Journal of Obstetrics and</u> <u>Gynecology</u> 159 (1988), 363-368.
- 22. Celia Christie, Jennifer Lee-Hirsh, Benjamin Rogall, Samuel Merrill, III, Angela Ramlal, Victoria Karian, and Francis Black. Durability of passive measles antibody in Jamaican children, International Journal of Epidemiology 19 (1990), 698-702.
- 23. Samuel Merrill, III and Nicolaus Tideman. 1991. The relative efficiency of approval and Condorcet voting procedures, <u>Rationality and Society</u>, 3: 65-77.

- 24. Robert Makuch, Michael Escobar, and Samuel Merrill, III. 1991. A two-sample test for incomplete multivariate data, <u>Journal of the Royal Statistical Society (Series C): Applied Statistics</u> 40: 202-212.
- 25. Steven J. Brams and Samuel Merrill, III. 1991. Final-Offer Arbitration with a Bonus, <u>European Journal of Political Economy</u> 7: 79-92.
- 26. Steven J. Brams and Samuel Merrill, III. 1992. Arbitration Procedures with the Possibility of Compromise, <u>Control and Cybernetics</u>, special issue on <u>Bargaining and Arbitration in Conflicts</u> 21: 131-149.
- 27. Samuel Merrill, III. 1993. Voting Behavior under the Directional Spatial Model of Electoral Competition, <u>Public Choice</u> 77: 739-756.
- 28. Steven J. Brams and Samuel Merrill, III. 1994. Would Ross Perot Have Won the 1992 Presidential Election under Approval Voting? <u>PS: Political Science and Politics</u>: 39-44.
- 29. Samuel Merrill, III. A Probabilistic Model for the Spatial Distribution of Party Support in Multiparty Electorates. 1994. <u>Journal of the American Statistical Association</u> 89: 1190-1197.
- 30. Samuel Merrill, III. Discriminating between the Directional and Proximity Spatial Models of Electoral Competition. 1995. Electoral Studies 14: 273-287.
- 31. Samuel Merrill, III, and Bernard Grofman. 1997. Directional and Proximity Models of Voter Choice: A New Synthesis and an Illustrative Test of Competing Models. <u>Journal of Theoretical Politics</u> 9: 25-48.
- 32. Samuel Merrill, III, and Bernard Grofman. 1997. Modeling Large Electorates with Fourier Series, with Applications to Nash Equilibria in Proximity and Directional Models of Spatial Competition. Social Choice and Welfare 14: 545-562.
- 33. Samuel Merrill, III, and Bernard Grofman. 1998. Conceptualizing Voter Choice for Directional and Discounting Models of Two-candidate Spatial Competition in terms of Shadow Candidates. Public Choice 95: 219-231.
- 34. Samuel Merrill, III, Bernard Grofman, and Scott Feld. 1999. Nash Equilibrium Strategies in Directional Models of Two-Candidate Spatial Competition. <u>Public Choice</u> 98: 369-383.
- 35. Samuel Merrill, III, Bernard Grofman, Thomas Brunell, and William Koetzle. 1999. The Power of Ideologically Concentrated Minorities. <u>Journal of Theoretical Politics</u> 11: 57-74.
- 36. Bernard Grofman, Samuel Merrill, III, Thomas Brunell, and William Koetzle. 1999. The Potential Electoral Disadvantages of a Catch-All Party: With an Application to Ideological Variance among Republican and Democratic Identifiers in the 50 States. <u>Party Politics</u> 5: 199-210.
- 37. James Adams and Samuel Merrill, III. 1999. Modeling Party Strategies and Policy Representation in Multiparty Elections: Why Are Strategies So Extreme?' <u>American Journal of Political Science</u> 43: 765-791.

- 38. James Adams and Samuel Merrill, III. 1999. Party Policy Equilibrium for Alternative Spatial Voting Models: An Application to the Norwegian Storting. <u>European Journal of Political Research</u> 36(2): 235-256.
- 39. James Adams and Samuel Merrill, III. 2000. Spatial Models of Candidate Competition and the 1988 French Presidential Election: Are Presidential Candidates Vote-Maximizers? <u>Journal of Politics</u> 62(3): 729-756.
- 40. Bernard Grofman, William Koetzle, Samuel Merrill, III, and Thomas Brunell. 2001. Changes in the Location of the Median Voter in the U.S. House of Representatives, 1963-1996. <u>Public</u> Choice 106: 221-232.
- 41. Samuel Merrill, III, and James Adams. 2001. Computing Nash Equilibria in Probabilistic, Multiparty Spatial Models with Non-policy Components. <u>Political Analysis</u> 9: 347-361.
- 42. Samuel Merrill, III, Bernard Grofman, and James Adams. 2001. Assimilation and Contrast Effects in Voter Projections of Party Locations: Evidence from Norway, France, and the U.S. European Journal of Political Research 40(2): 199-221.
- 43. Samuel Merrill, III, and James Adams. 2002. Centrifugal Incentives in Multicandidate Elections. Journal of Theoretical Politics 14(3): 275-300.
- 44. Adams, James and Samuel Merrill, III. 2003. Voter Turnout and Candidate Strategies in American Elections. Journal of Politics 65(1): 161-189.
- 45. Grofman, Bernard, and Samuel Merrill, III. 2004. Ecological Regression and Ecological Inference, in <u>Ecological Inference</u>: New Methodological Strategies, Gary King et al. eds. Cambridge, England: Cambridge University Press.
- 46. Grofman, Bernard, and Samuel Merrill, III. 2004. Anticipating Likely Consequences of Lottery-Based Affirmative Action. <u>The Social Science Quarterly</u> 85(5) 1447-1468.
- 47. James Adams and Samuel Merrill, III. 2005. Candidates' Policy Platforms and Election Outcomes: The Three Faces of Policy Representation. <u>European Journal of Political Research</u> 44(6): 899-918.
- 48. James Adams, Samuel Merrill, III, and Bernard Grofman. 2005. Does France's Two-Ballot Presidential Election System Alter Candidates' Policy Strategies? A Spatial Analysis of Office-Seeking Candidates in the 1988 Presidential Election. <u>French Politics</u> 3(2): 98-123.
- 49. James Adams, Jay Dow, and Samuel Merrill, III. 2006. The Political Consequences of Alienation-Based and Indifference-Based Voter Abstention: Applications to Presidential Elections. <u>Political Behavior</u> 28(1): 65-86.
- 50. James Adams and Samuel Merrill, III. 2006. Why Small, Centrist Third Parties Motivate Policy Divergence by Major Parties. <u>American Political Science Review</u> 100(3): 403-417.
- 51. Samuel Merrill, III, and James Adams. 2007. The Effects of Alternative Power-Sharing Arrangements: Do "Moderating" Institutions Moderate Party Strategies and Government Policy Outputs? Public Choice 131 (June): 413-434.

- 52. Samuel Merrill, III, Bernard Grofman, and Thomas Brunell. 2008. Cycles in American National Electoral Politics, 1854-2006: Statistical Evidence and an Explanatory Model. <u>American Political Science Review</u> 102(1): 1-17.
- 53. James Adams and Samuel Merrill, III. 2008. Candidate and Party Strategies in Two-Stage Elections Beginning with a Primary. American Journal of Political Science 52(2): 344-359.
- 54. James Adams and Samuel Merrill, III. 2009. Policy-seeking Parties in a Parliamentary Democracy with Proportional Representation: A Valence-Uncertainty Model. <u>British Journal of Political Science</u> 39(3): 539-558.
- 55. James Adams, Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2010. Why Candidate Divergence should be Expected to be just as Great (or Even Greater) in Competitive Seats as in Non-competitive Ones. <u>Public Choice</u> 145(3-4): 417-433.
- 56. Samuel Merrill, III, Bernard Grofman, and Thomas Brunell. 2010. Do British Party Politics Exhibit Cycles? <u>British Journal of Political Science</u> 41(1): 33-55.
- 57. Adams, James, Samuel Merrill, III, Elizabeth Simas, and Walter Stone. 2011. When Candidates Value Good Character: A Spatial Model with Applications to Congressional Elections. <u>Journal of Politics</u> 73(1): 17-30.
- 58. Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2012. Magnitude and Durability of Electoral Change: Identifying Critical Elections in the U.S. Congress 1854-2010. <u>Electoral Studies</u> 31(4): 816-828.
- 59. James Adams and Samuel Merrill, III. 2013. Policy-seeking candidates who value the valence attributes of the winner. Public Choice 155(1-2): 139-161.
- 60. James Adams, Lawrence Ezrow, Samuel Merrill, III, and Zeynep Somer-Topcu. 2013. Does Collective Responsibility for Performance Alter Party Strategies? Policy-Seeking Parties in Proportional Systems. <u>British Journal of Political Science</u> 43(1): 1-23.
- 61. James Adams, Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2013. Do Competitive Districts Necessarily Produce Centrist Politicians? In <u>Advances in Political Economy: Institutions</u>, <u>Modelling and Empirical Analysis</u>, Normal Schofield, Gonzalo Caballero, and Daniel Kselman, eds., pp. 331-350. Berlin: Springer.
- 62. Scott L. Feld, Samuel Merrill, III, and Bernard Grofman. 2014. Modeling the Effects of Changing Issue Salience in Two-Party Competition. <u>Public Choice</u> 158 (March; 3-4): 465-482.
- 63. James Adams and Samuel Merrill, III. 2014. Candidates' Policy Strategies in Primary Elections: Does Strategic Voting by the Primary Electorate Matter? <u>Public Choice</u> 160 (July; 1-2): 7-24.
- 64. Samuel Merrill, III, Bernard Grofman, and Thomas Brunell. 2014. Modeling the Electoral Dynamics of Party Polarization in Two-Party Legislatures. <u>Journal of Theoretical Politics</u> 26 (October; 4): 548-572.

- 65. Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2016. Replacement in the U.S. House: An Outlier-Chasing Model. <u>Party Politics</u> 22 (July; 4): 440-451.
- 66. Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2016. Components of Party Polarization in the U.S. House of Representatives. <u>Journal of Theoretical Politics</u> 28 (Oct.; 4): 598-624.
- 67. Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2016. The Volatility of Median and Supermajoritarian Pivots in the U.S. Congress and The Effects of Party Polarization. <u>Public</u> Choice 166 (1-2): 183-204.
- 68. Samuel Merrill, III and Bernard Grofman. 2019. What are the Effects of Entry of New Extremist Parties on the Policy Platforms of Mainstream Parties? <u>Journal of Theoretical Politics</u> 31(3): 453-473.
- 69. Samuel Merrill, III, Bernard Grofman, and Thomas Brunell. 2022. Identifying the "Downsian Ceiling": When Does Polarization Make Appealing to One's Base More Attractive than Moderating to the Center. <u>Journal of Political Institutions and Political Economy</u> 3 (3–4): 273-293.
- 70. James Adams, Samuel Merrill, III and Roi Zur. 2023. How much does issue salience matter? A model with applications to the UK elections. <u>European Journal of Political Research</u>
- 71. Samuel Merrill, III, Bernard Grofman, and Lucy Barnes. Forthcoming. Taxation, Spending and Economic Inequality: The Simple Analytics of the Gini Index. Journal of Theoretical Politics.

### **EXPOSITORY PUBLICATIONS**

- 1. Samuel Merrill, III. 'For approval voting,' Op-Ed page, <u>The New York Times</u>, July 20, 1979.
- 2. Samuel Merrill, III. <u>Decision analysis for multicandidate voting systems</u>, module completed (1980) on assignment for Undergraduate Mathematics Applications Project (UMAP), Education Development Center, Newton, Mass.
- 3. Samuel Merrill, III. 'Approval voting in ASA,' <u>Amstat News</u> (Newsletter of the American Statistical Association), April 1989, pp. 1-2.
- 4. Steven J. Brams, Marc Kilgour, and Samuel Merrill, III. 'Arbitration Procedures,' chapter in Negotiation Analysis, ed. P. Young, Univ. of Michigan Press (1991), pp. 47-66.
- 5. Samuel Merrill, III. 'Approval Voting Makes More Meaningful Elections,' Op-Ed piece distributed nationwide by Scripps-Howard, appeared in a number of papers, 1995-96.
- 6. Samuel Merrill, III. Review of <u>Mathematics and Politics</u> by Alan Taylor. <u>American Mathematical Monthly</u> 104 (January, 1997), 82-85.
- 7. James Adams, Samuel Merrill, III and Roi Zur. The Spatial Voting Model. In <u>The Sage Handbook of Research Methods in Political Science and International Relations</u>, eds. Luigi Curini and Robert Franzese, SAGE Publications (2020), 205-223.
- 8. James Adams, Bernard Grofman, and Samuel Merrill, III. Forthcoming. Spatial Models of Party Competition