

Government 413/613: Election Forensics

Spring 2007, Wednesday 2:30–4:25 (WE B02)

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Course web page: <http://macht.arts.cornell.edu/wrm1/gov613.html>

Course Requirements

This is a research seminar. I expect you to participate actively in seminar discussions. Each week (through April 11) you are expected to submit a short paper that discusses research implications of the week's reading. Your paper should provide the basis for comments you will make during the seminar meeting. The short papers are due the day before class, meaning Tuesday at 4:30pm.

Your principal work for the seminar is to write a research paper on some topic relevant to the themes, analytical tools and data considered in the course. A proposal for the paper is due by March 28. The proposal should be in the vicinity of 5-10 pages in length, state the question and hypotheses to be addressed, describe the data and the analytical plan and connect the paper to relevant literature. The paper is due in my office on May 14.

Assignment Due Dates

due date	description
weekly	short paper
March 28	proposal
May 14	research paper

Reading Availability

I ordered the following books for the course at the campus store. Articles in refereed journals are available either through J-Stor or online e-journals. All URLs are live in the online version of this syllabus, linked to the course webpage. This especially matters for the DU items.

Fortier, John C. *Absentee and Early Voting*. American Enterprise Institute

Gumbel, Andrew. 2005. *Steal This Vote*. Nation Books.

Hayduk, Ronald. *Gatekeepers to the Franchise*. Northern Illinois University Press

Miller, Mark Crispin. 2005. *Fooled Again* Basic Books.

Rubin, Aviel. *Brave New Ballot*. Morgan Road Books

Saltman, Roy *The History and Politics of Voting Technology*. Palgrave Macmillan.

Reading schedule

1. A Standards Model and Political History Overview (Jan 31)

- American Institute of Certified Public Accountants. 2005. *AICPA Professional Standards, volume 1*, “AU Section 316: Consideration of Fraud in a Financial Statement Audit (Source: SAS No. 99).” Pages 277—300-25. [available in Reference at the Management Library (Sage Hall)]
- Gumbel. *Steal This Vote*
- Hayduk. *Gatekeepers to the Franchise*. Chapters 1–5.

Campbell, Tracy. 2005. *Deliver the Vote: A History of Election Fraud, An American Political Tradition, 1742–2004*. Carroll & Graf.

2. Election Administration (Feb 7)

- Fortier. *Absentee and Early Voting*
- The Brennan Center for Justice Voting Technology Assessment Project. 2006. *The Machinery of Democracy: Voting System Security, Accessibility, Usability, and Cost*. http://www.brennancenter.org/stack_detail.asp?key=97&subkey=38150&init_key=105

Joseph Harris. 1934. *Election Administration in the United States*. Brookings.
http://vote.nist.gov/electi_admin.htm

3. Voting Technology (Feb 14)

- Rubin. *Brave New Ballot*
- Saltman. *The History and Politics of Voting Technology*
- Punchscan. Watch the Intro videos at Learn More and look over the FAQ.
<http://punchscan.org/>
- Norden, Lawrence, Jeremy M. Creelan, David Kimball and Whitney Quesenbery. 2006. *The Machinery of Democracy: Usability of Voting Systems*.
http://www.brennancenter.org/stack_detail.asp?key=97&subkey=36941&init_key=105

Saltman, Roy G. 1988. “Accuracy, Integrity, and Security in Computerized Vote-Tallying.” NBS Special Publication 500-158. <http://www.itl.nist.gov/lab/specpubs/500-158.htm>

Mercuri, Rebecca. 2002. “A Better Ballot Box?” *IEEE Spectrum*
<http://www.notablessoftware.com/Papers/1002evot.pdf>

Mercuri, Rebecca. 2005. “Electronic Voting” [skim and dip at will]
<http://www.notablessoftware.com/evote.html>

Bev Harris. *Black Box Voting*. <http://blackboxvoting.com/>

4. Threat Analysis (Feb 21 [snowed out])

5. Threat Analysis (Feb 28)

- Brennan Center Task Force on Voting System Security. 2006. *The Machinery of Democracy: Protecting Elections in an Electronic World*.
http://www.brennancenter.org/stack_detail.asp?key=97&subkey=36343&init_key=105
- Plausible deniability & Election eTheft
<http://www.democraticunderground.com/thread/203x397259>
Holt, Rush. *H.R. 811: Voter Confidence and Increased Accessibility Act of 2007 (Introduced in House)*.
[http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.811:](http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.811:.pdf)
.pdf version available at
http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h811ih.txt.pdf

If you had to guess how the tabulation fraud was pulled off on Nov. 2..

<http://www.democraticunderground.com/thread/203x337686>

6. Sarasota 2006 (Feb Mar 7)

- Frisina, Laurin, Michael Herron, James Honaker and Jeffrey Lewis. 2007. “Ballot Formats, Touchscreens, and Undervotes: A Study of the 2006 Midterm Elections in Florida.” MS. Draft of February 13, 2007.
<http://www.dartmouth.edu/~herron/cd13.pdf>
- Mebane, Walter R., Jr., and David L. Dill. 2007. “Factors Associated with the Excessive CD-13 Undervote in the 2006 General Election in Sarasota County, Florida.” MS.
<http://macht.arts.cornell.edu/wrm1/smachines1.pdf>
- Browning, Kurt S. 2007. “Statement from Secretary Kurt S. Browning on the Release of the Division of Elections Audit Report and Independent Study from the Security and Assurance in Information Technology Lab.” Press release.
<http://election.dos.state.fl.us/pdf/KBrowningAuditReport.pdf>
- Browning, Kurt S. 2007. “Audit Report of the Election Systems and Software, Inc.’s, iVotronic Voting System in the 2006 General Election for Sarasota County, Florida (February 2007).” Report. Florida Department of State, Division of Elections.
<http://election.dos.state.fl.us/pdf/auditReportSarasota.pdf>
- Yasinsac, Alec, David Wagner, Matt Bishop, Ted Baker, Breno de Medeiros, Gary Tyson, Michael Shamos and Mike Burmester. 2007. “Software Review and Security Analysis of the ES&S iVotronic 8.0.1.2 Voting Machine Firmware.” Report. Security and Assurance in Information Technology Laboratory, Florida State University, Tallahassee, Florida, February 23, 2007.
<http://election.dos.state.fl.us/pdf/FinalAudRepSAIT.pdf>
- Felten, Ed. 2007. “Sarasota: Could a Bug Have Lost Votes?” Freedom to Tinker blog.
<http://www.freedom-to-tinker.com/?p=1126>
- Feldman, Ariel J., J. Alex Halderman, and Edward W. Felten. 2006. “Security Analysis of the Diebold AccuVote-TS Voting Machine: Main Demonstration Video.” Video.
<http://itpolicy.princeton.edu/voting/videos/ts-paper.wmv>

Feldman, Ariel J., J. Alex Halderman, and Edward W. Felten. 2006. “Security Analysis of the Diebold AccuVote-TS Voting Machine.” MS.

<http://itpolicy.princeton.edu/voting/ts-paper.pdf>

7. Florida 2000: Overdispersion, Outliers and Overvotes (Mar 14)

- Wand, Jonathan N., Kenneth W. Shotts, Jasjeet S. Sekhon, Walter R. Mebane, Jr., Michael C. Herron, and Henry E. Brady. 2001. "The Butterfly Did It: The Aberrant Vote for Buchanan in Palm Beach County, Florida." *American Political Science Review* 95 (December): 793–810. available at <http://macht.arts.cornell.edu/wrm1/butterfly.pdf>
- Mebane, Walter R., Jr. 2004. "The Wrong Man is President: Overvotes in the 2000 Presidential Election in Florida." *Perspectives on Politics* 2 (Sept.): 525–535. MS available at <http://macht.arts.cornell.edu/wrm1/mebane.pop2004.pdf>
- Herron, Michael C., and Jasjeet S. Sekhon. Forthcoming 2004. "Black Candidates and Black Voters: Assessing the Impact of Candidate Race on Uncounted Vote Rates." *Journal of Politics* 66 (November). MS available at <http://elections.berkeley.edu/election2000/HerronSekhon.candidates.pdf>

Herron, Michael C., and Jasjeet S. Sekhon. 2003. "Overvoting and Representation: An Examination of Overvoted Presidential Ballots in Broward and Miami-Dade Counties." *Electoral Studies* 22 (1):21–47.
<http://elections.berkeley.edu/election2000/HerronSekhon.pdf>

Tomz, Michael, and Robert P. Van Houweling. 2003. "How Does Voting Equipment Affect the Racial Gap in Voided Ballots?" *American Journal of Political Science* 47 (1): 46–60.

Mebane, Walter R., Jr., and Jasjeet S. Sekhon. 2004. "Robust Estimation and Outlier Detection for Overdispersed Multinomial Models of Count Data" *American Journal of Political Science* 48 (Apr.): 392–411.

8. Fraud in 2004? (Mar 28)

- House Judiciary Committee Democratic Staff. 2005. *Preserving Democracy: What Went Wrong in Ohio*.
http://www.house.gov/judiciary_democrats/ohiostatusrept1505.pdf
- Miller. *Fooled Again*. Chapters 1–5.
- Democratic National Committee. 2005. *Democracy At Risk: The 2004 Election in Ohio*. Section VI.
<http://macht.arts.cornell.edu/wrm1/Ohio2004/OhioReportCover2Cover.pdf>
- Mebane, Walter R., Jr. 2006. "Election Forensics: The Second-digit Benford's Law Test and Recent American Presidential Elections." Paper prepared for the Election Fraud Conference, Salt Lake City, Utah, September 29–30, 2006. Pages 9–13.
<http://macht.arts.cornell.edu/wrm1/fraud06.pdf>
- Tanner, John. 2005. Letter to Nick A. Soulas, Jr., Assistant Prosecuting Attorney, Franklin County, Ohio. June 29, 2005.
http://www.usdoj.gov/crt/voting/misc/franklin_oh.pdf
- Mebane, Walter R., Jr. 2005. "Voting Machine Allocation in Franklin County, Ohio, 2004: Response to U.S. Department of Justice Letter of June 29, 2005."
<http://macht.arts.cornell.edu/wrm1/franklin2.pdf>

Democratic National Committee. 2005. *Democracy At Risk: The 2004 Election in Ohio*. Sections I–V.

<http://macht.arts.cornell.edu/wrm1/Ohio2004/OhioReportCover2Cover.pdf>

Ten Good Reasons to Believe that the 2004 Presidential Election Was Stolen

<http://www.democraticunderground.com/thread/132x2052179>

Ohio Election Fraud (Formerly “Fairness”) [review some items]

<http://fairnessbybeckerman.blogspot.com/2005/08/articles-and-commentary-on-2004.html>

Ray Beckerman. *Ohio Election 2004* [review some items] <http://ohioelection2004.com/>

9. Benford’s Law Tests (Apr 4)

- Mebane, Walter R., Jr. 2006. “Election Forensics: Vote Counts and Benford’s Law.” Prepared for delivery at the 2006 Summer Meeting of the Political Methodology Society, UC-Davis, July 20-22.

<http://macht.arts.cornell.edu/wrm1/pm06.pdf>

- Mebane, Walter R., Jr. 2006. “Election Forensics: The Second-digit Benford’s Law Test and Recent American Presidential Elections.” Paper prepared for the Election Fraud Conference, Salt Lake City, Utah, September 29–30, 2006.

<http://macht.arts.cornell.edu/wrm1/fraud06.pdf>

Cindy Durtschi, William Hillison and Carl Pacini. 2004. “The Effective Use of Benford’s Law to Assist in Detecting Fraud in Accounting Data.” *Journal of Forensic Accounting* 5:17-34.

Hill, Theodore P. 1995. “A Statistical Derivation of the Significant-digit Law.” *Statistical Science* 10 (4): 354–363.

Janvresse, Élise, and Thierry de la Rue. 2004. “From Uniform Distributions to Benford’s Law.” *Journal of Applied Probability* 41: 1203–1210.

10. Fraud, Recounts and Election Monitoring (Apr 11)

- Bjornlund, Eric C. 2004. *Beyond Free and Fair: Monitoring Elections and Building Democracy*. Washington, DC: Woodrow Wilson Center Press. Chapters 1–3, 6–7, 13.

- Rivest, Ronald L. 2007. “On Auditing Elections When Precincts Have Different Sizes.”

<http://theory.csail.mit.edu/~rivest/Rivest-OnAuditingElectionsWhenPrecinctsHaveDifferen>

- Mebane, Walter R., Jr. 2007. “Evaluating Voting Systems To Improve and Verify Accuracy.” Prepared for presentation at the 2007 Annual Meeting of the American Association for the Advancement of Science, San Francisco, CA, February 16, 2007, and at the Bay Area Methods Meeting, Berkeley, March 1, 2007.

<http://macht.arts.cornell.edu/wrm1/bamm07.pdf>

- Hyde, Susan D. 2005. *Observing Norms: Explaining the Causes and Consequences of Internationally Monitored Elections*. Chapter 7: “Can International Election Observers Deter Election Day Fraud? Evidence from a Natural Experiment.” (dissertation draft chapter). <http://weber.ucsd.edu/~shyde/ARMENIA.pdf>

- European Union. 2001. “Preliminary Statement—2 October 2001.” European Union–Election Observation Mission in Bangladesh 2001.

<http://www.lcgbangladesh.org/election01/docs/eu2oct01.pdf>

11. Voting Machine Allegations and Tests (Apr 18)

- Miller. *Fooled Again*. Pages 191–239.
- Anonymous. 2004. “FL: Unknown: Voter Reg vs Results: by County.”
http://uscountvotes.org/index.php?option=com_content&task=view&id=35&Itemid=43
- Mebane, Walter R. Jr. 2004. “Letter Sent to the Editor of Common Dreams Regarding ‘Evidence Mounts That The Vote May Have Been Hacked,’ by Thom Hartmann.”
<http://macht.arts.cornell.edu/wrm1/commondreams/commondreams.html>
- Mebane, Walter R. Jr. 2004. “Letter Sent to Kathy Dopp (organizer of ustogether.org) Regarding the Responses to my Letter that were Posted at ustogether.org.”
<http://macht.arts.cornell.edu/wrm1/ustogether/ustogether.html>
- Sekhon, Jasjeet S. 2004. “The 2004 Florida Optical Voting Machine Controversy: A Causal Analysis Using Matching.”
<http://sekhon.berkeley.edu/papers/SekhonOpticalMatch.pdf>
- Wand, Jonathan. 2004. “Evaluating the Impact of Voting Technology on the Tabulation of Voter Preferences: The 2004 Presidential Election in Florida.”
<http://wand.stanford.edu/elections/us/FL2004/WandFlorida2004.pdf>
- Mebane, Walter R., Jr. 2006. “Detecting Attempted Election Theft: Vote Counts, Voting Machines and Benford’s Law.” Prepared for the 2006 Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 20–23. Pages 1–11.
<http://macht.arts.cornell.edu/wrm1/mw06.pdf>

Benjamini, Yoav, and Yosef Hochberg. 1995. “Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing.” *Journal of the Royal Statistical Society, Series B* 57 (1): 289–300.

12. Exit Polls and Other Surveys (Apr 25)

- Democratic National Committee. 2005. *Democracy At Risk: The 2004 Election in Ohio*. Sections III, IV and V.
<http://macht.arts.cornell.edu/wrm1/Ohio2004/OhioReportCover2Cover.pdf>
- Edison Media Research and Mitofsky International. 2005. “Evaluation of Edison/Mitofsky Election System 2004.”
<http://www.exit-poll.net/election-night/EvaluationJan192005.pdf>
- Lindeman, Mark. 2006. “Beyond Exit Poll Fundamentalism: Surveying the 2004 Election Debate.” Paper prepared for presentation at the 61st Annual Conference of the American Association for Public Opinion Research, Montreal, Canada, May 18–21, 2006.
<http://inside.bard.edu/~lindeman/beyond-epf.pdf>

13. Research Presentations (May 2)