

Black Box Ballyhoo

Voting Technology in the 2004 Election

As the 2004 elections approached, some voters still had nightmarish visions of hanging chads dancing in their heads. In the wake of the 2000 election, when the choice of president hinged on ambiguous punch card ballots in Florida, election reformers vowed to introduce more sophisticated and accurate voting technologies nationwide. As one study by the Caltech-MIT Voting Technology Project (VTP) found, “faulty and outdated voting technology together with registration problems” resulted in “4 to 6 million votes lost during the 2000 election.”

This effort has yielded significant results in just four years: According to the *Chronicle of Higher Education*, in the 2004 election, approximately one-third of all voters, in 39 states, cast their votes using electronic voting machines. New machines, such as Diebold’s AccuVote, allow voters to use touch screens instead of old-fashioned punch cards, lever systems, or fill-in-the-dot ballots.

For voters who are suspicious of such technologies, it is worth noting that electronic voting is supposedly safer than the old-fashioned paper ballot. As Ted Selker, the co-director of the VTP wrote in *Newsday* a few weeks before the election, “Electronic voting machines offer the safest voting method currently available, provided that their use is carefully supervised and monitored.” Voters casting electronic ballots “don’t have to worry

about their votes being ‘helpfully’ altered by a poll worker,” Selker pointed out, “nor can electronic votes be temporarily misplaced, as the ballot box was where I was poll watching last October in California.”

But groups such as the Electronic Frontier Foundation (EFF) and the Verified Voting Foundation were more critical of the performance of voting technologies in 2004. As the EFF notes on its website, “Communities across America are purchasing electronic voting machines, but the technology has serious security problems that aren’t being addressed. Most of the machines use ‘black box’ software that hasn’t been publicly reviewed for security. Almost none provide voter-verifiable paper ballots to detect fraud.” Some critics, such as computer science professor Aviel D. Rubin of Johns Hopkins University, have warned that appropriate safeguards against computer hackers are not yet in place. “The machines are vulnerable to rigging, and somebody could tamper with them in a way that wouldn’t be detectable,” Rubin told the *Chronicle of Higher Education*.

Still others feel the bar has not been set quite high enough to warrant the eager embrace of electronic voting. As one technology industry analyst characterized it to the *New York Times*, “I guess if you used to applaud Evel Knievel on his successful motorcycle jumps, then you’d applaud the voting

machine companies.... Hooray! They didn't crash and burn this time!" But he argued that the process of voting "should be so trustworthy that we expect everything to go right. That is not the case yet with electronic voting machines." Skeptics note that voters feel more confident if they know that the electronic voting machines are producing a paper trail—by printing out a hard copy of each vote cast, for example—rather than merely registering a screen touch in the voting machine's memory. The *Times* notes that several states, including Nevada and California, will require such paper trails in future elections.

Electronic voting in 2004 was not without glitches. Some machines failed, and election officials were not always prepared to respond with technical support or with back-up paper ballots, which meant that some voters were turned away at the polls. And in some places, the machines reportedly counted more votes than there were voters. But the evidence overwhelmingly suggests that voting technologies yield less fraudulent elections. In a series of reports (available on the web at vote.caltech.edu), the VTP concluded that there was no evidence of systemic voting fraud in the 2004 election. In fact, one researcher on the project told the *Philadelphia Inquirer* that the error rate was likely half of what it had been in the election of 2000.

Both boosters and critics of voting technologies agree, however, that President Bush's margin of victory was large enough that any problems

with electronic voting would not have influenced the final outcome of the election. This is a fact that has been lost on conspiracy theorists. In blogs and mass e-mails, disgruntled voters vented their frustrations by claiming that Bush had stolen the election, focusing particularly on Florida, where, it was claimed, counties with high numbers of registered Democrats went instead to Bush. As the *New York Times* reported, one Utah woman's mathematical musings on this subject were evidently so convincing that Reps. John Conyers, Jerrold Nadler, and Robert Wexler included her website as a source in a post-election letter they sent to the Government Accountability Office demanding an investigation. Political scientists quickly debunked the conspiracy theorizing, however, noting that "many of those Democratic counties in Florida have a long tradition of voting Republican in presidential elections."

Even Senator John Kerry's lawyers conceded that such claims were bogus: "We know this was an emotional election, and the losing side is very upset," one Kerry lawyer told the *Times*, but "I have not seen anything to indicate intentional fraud or tampering." Another Kerry campaign official made a similar observation to the *Boston Globe*: "I get why people are frustrated, but Republicans did not steal this election.... There were a few problems here and there ... but unlike 2000, there is no doubt that they actually got more votes than we did. And they got them in the states that mattered."

Back in 1992, Ross Perot drew chuckles when he suggested that Americans might one day vote from their living rooms, simply pressing a button on their television screens to register their choice. Perhaps the quixotic Texan was more prescient than we realized. Armchair voting is not on the immediate horizon, but our cultural commitment to make voting as easy as possible means that voting alone from home

might indeed lie in our civic future. This would be an unfortunate development, making our public life and our consumer culture even more indistinguishable. Still, it remains too early to draw any final conclusions about the reliability of high-tech voting; the critics may still prove to be right. If so, we may seek a solution in the other direction—not high-tech, but low-tech, with the simple paper ballot making a comeback.