

Social Machine Politics Are Here to Stay



Kieron O'Hara • University of Southampton

The dust has settled now that Barack Obama has become only the second Democrat since World War II to win two US presidential elections. The fight was close, with Obama winning the popular vote against his Republican opponent, Mitt Romney, by two or three percentage points. Yet at the same time, at least in the final few days, it seemed strangely inevitable, as Obama's tiny poll leads in the swing states (often less than the margins of error) didn't budge, accurately reflecting the outcome.

From a digital citizenship viewpoint, however, the result isn't the key thing. We in the wired world want to know which technologies won the election, and whether they will make politics easier, safer, or more rational in the future.

The US has always been ahead of the curve in digital politics. Its mega-campaigns collect and spend (maybe squander) absurd quantities of cash, they last forever, and – perhaps most important – they're run by the candidates, not the parties. Obama's campaign was Obama's, not the Democratic Party's (this isn't true elsewhere – for instance, David Cameron's campaign in the UK is run by the Conservative Party, of which he's the leader). The US provides space for entrepreneurialism and experimentation, not least in the use of technology. Other nations will eventually follow its lead, so let's hope the tech is kind to us. And last year, the stories were microblogging, social networks, and big data.

Microblogging

It seems clear that compared to 2008, microblogging has stolen the show from the old-style, considered, argued, substantially-more-than-140-characters blog. The drama of the instantaneous reaction – and the instantaneous statistics – trumps the

longer format (which itself was thought dangerously unconsidered when blogging began to upstage newspaper commentary). Election night 2012 was the most tweeted event in US political history (breaking a record set only five weeks previously by the first Obama-Romney debate), and it also gave us the most retweeted message (Obama's victory tweet).¹

We're reaching the point at which someone making a stump speech might find himself dealing with the fallout from its beginning before he has concluded. Romney's "binders full of women" comment was an Internet meme illustrated with animated gifs before the debate in which he made the remark had finished. Obama's poor performance in the first debate was nailed within minutes of its start by comedian Bill Maher's tweets.²

This instantaneity is attractive. Ramona McNeal of the University of Northern Iowa, coauthor of *Digital Citizenship*,³ points out that "the youth vote was not as engaged as it was in 2008; surveys have suggested members of the under-30 demographic waited until September before becoming engaged with the election." Immediate commentary makes it easier to engage with something you've ignored for months. I ran a deeply unscientific survey with a sample size of 1 – my colleague Max Van Kleek of Southampton University, who might be the only Democrat in Idaho. Van Kleek found it easy to follow the election using social networks, real-time videos, news sites, and others. His main beef was official sites' clunkiness – he didn't get to vote because remote registration was extremely bureaucratic in his home state, giving him a life's-too-short moment. Of course, turnout itself became politically contested (the heuristic being that the easier it was to vote, the

better for Democrats), but there's a lesson here for the states. Usability and speed are all.

Social Media

The candidates were falling over themselves to use social media. McNeal argues that social media was “the big story — for getting out the vote, as a place for individuals to discuss politics, a small but upcoming place for news, and as a place to post political videos.”

A well-timed article in *Nature* by James Fowler and colleagues at the University of California, San Diego, described an experiment in which positive messages about voting were placed on Facebook during the 2010 midterms, together with an “I voted” button to click.⁴ The positive messages on their own had no effect

partisan effects (given, for instance, the supposed tendency of key Obama supporters — young, black, or Hispanic voters — to vote less)? At the moment, Fowler finds it hard to speculate here; the network's behavior seemed to provide no greater motivation to liberals over conservatives, but in 2010, he relied on the vanishingly small number of voters who self-reported. With Facebook's cooperation, he and his colleagues ran an even larger experiment in last year's election, hoping to combine direct evidence with attributions of voters' ideology inferred from Facebook likes. At the time of writing, the results aren't in; we digital citizens await them with great interest. But a note of caution: Fowler's experiment dealt in participatory positives. Could such a scheme be

out that “the lowered costs have not had a major effect, compared to the ability to see what friends are doing online.” These effects ramify, even if relatively modest numbers of people use technology to follow elections (as shown by a series of reports from the invaluable Pew Internet and American Life Project⁷⁻¹⁰).

Political Social Machines

Bimber has been studying the use of technology in US elections for more than a decade, and believes the trajectory is fairly constant. The Internet is creating a world in which traditional political organizations can be bypassed — the Occupy movement, the Arab Spring, and the Spanish *indignados* have all flourished without leadership. It's fair to say that none of these movements has been totally successful in its aims, but they're now part of the scene. Bimber argues that political organizations — the machines of machine politics — are reacting and adapting to the new reality.

Digital citizens are changing too. “Traditional conceptions of citizenship are organized around obligations to institutions,” Bimber argues. “Over the last 15 years, a new approach has emerged that does not have those orientations, and is more to do with lifestyle, is more expressive and individualistic. Social media have helped orient citizens away from institutions and toward other citizens.”

In this individualistic world, it does appear that Obama is ahead of the curve. The use of technology is an arms race; Obama outflanked McCain in 2008, but Romney learned the lessons and exploited social media too. Where Obama seems to have retained his lead is the seamless integration of social media and microblogging with the use of big data on clickstreams to track opinion, combined with offline door-to-door operations involving thousands

The use of technology is an arms race; Obama outflanked McCain in 2008, but Romney learned the lessons and exploited social media too.

as compared to a control group that received no messages. However, a 2.2 percent increase occurred in voting among people who received the messages in addition to the profile pictures of half a dozen Facebook friends who had clicked “I voted.” This was made up of a 0.4 percent direct effect from the experimental message, supplemented with a 1.8 percent increase from the indirect effects of seeing messages (for example, in news feeds) about friends' voting. These small but significant increases would appear as noise in a smaller experiment, but the giant sample size — 61 million — enabled Fowler to identify them.

Increasing participation is no doubt a good thing, but could it have

used to disseminate voter apathy? Fowler's hunch is that yes, it's possible to spread antisocial messages.

His conclusion is fascinating: when we look at political interventions, the individual recipient is now not the basic unit. “If you're not looking at the friends, you're not looking at all the story. Eighty percent of the total effect was on the friends of those treated. We have to shift the way we evaluate interventions, from the individual to the network.”

Bruce Bimber of UC Santa Barbara, author of *Information and American Democracy*,^{5,6} agrees. To the question of whether political activity takes place online because of network effects, or because of the low barriers to entry, he points

of volunteers at 800 field offices.¹¹ The online and offline efforts drove each other. No demographic was too small to target; Obama gave a hastily scheduled and well-received AMA (Ask Me Anything) on Reddit, while his website made it straightforward for people to donate small sums (the ease with which Obama supporters could feel included in his campaign appealed to Van Kleek). Meanwhile, behind the scenes, you could sense ruthlessness: Obama's campaign manager Jim Messina stated "We are going to measure every single thing in this campaign."¹²

Romney used the same technologies¹³ but to less effect. The Orca analytics system performed unsatisfactorily, partly because of basic mistakes in IT training and deployment¹⁴ (Obama, meanwhile, kept his analytics fashionably in the cloud). On the ground, Romney had fewer than 300 field offices.

The winner seems to have been Obama's well-oiled machine — and with its combination of social networking, data crunching, and offline interaction, it closely resembles what Tim Berners-Lee has called a "social machine," using technology to coordinate action in real time at scale to achieve goals "in which people do the creative work and the machine does the administration."¹⁵

How effective was that machine? An intriguing statistic reveals its stiletto precision. Although Obama won handily among under-30s by 60–37, his vote in that demographic fell overall between 2008 and 2012. However, in the key swing states, more under-30s voted for him than in 2008. Where it was necessary to get out the vote to preserve his diverse coalition of supporters, the Obama machine delivered.

McNeal believes that Obama's get-out-the-vote effort could have been key, while Bimber points to the race's unusual closeness. Obama's brilliantly calibrated targeting ensured

that, under the US system, although the popular vote was close, he hoovered up the crucial swing states and thereby carried the Electoral College easily. In a no-contest, Obama's social machine would have had little or no effect (McGovern would still not have won in 1972, nor Goldwater in 1964, even with undreamt of technology).

Where's the Catch?

Some have argued, most notably Cass Sunstein (who for a time worked for the Obama administration), that the Internet creates "echo chambers" in which personalized news and other filtering mechanisms remove critical inputs, so that those with particular political views find them reinforced and amplified by like-minded folk.¹⁶

Some have argued that the Internet creates "echo chambers" in which personalized news and other filtering mechanisms remove critical inputs.

There seems to be little evidence of this effect (a Pew study of the 2010 midterms showed that although many seekers of online news did look for sources with the same political viewpoint, a largish minority actively sought sites they disagreed with).¹⁷

However, one of the more memorable incidents in the 2012 round provides interesting evidence of the Internet's ability to dissipate echo chamber effects. After Todd Akin, Republican senatorial candidate for Missouri, made remarks about rape that many considered offensive, the Internet played a major part in undermining his campaign (Missouri was expected to be a Republican gain, and indeed Romney beat Obama there by 10 percentage points, yet Akin lost his race). His view (which

might kindly be described as "sheltered" and therefore of the type that Sunstein worries about) didn't survive contact with the wider political process. As Van Kleek notes with some relish, "the Internet is very good at taking things out of context and setting them on fire."

A charge against the Internet that might stick rather better is its potential to trivialize. In 2012 "Paul Ryan shirtless" was Googled nine times more often than "Paul Ryan budget," while 5,000 searches occurred each month related to Mitt Romney's underwear. On the other hand, trivia tells us a lot. In 2008, the frequency of searches in a state for "Obama jokes" was a good predictor of the number of votes John McCain would get. And it can also tell us about our

dark side: in that election, 1 percent of searches including "Obama" also included racially provocative terms.¹⁸

Perhaps, though, the greatest loss might be the fun of elections. We're seeing a shift from the canny street wisdom of consultants such as James Carville and Karl Rove, toward the omniscience of the number crunchers. Statistician Nate Silver predicted the outcome in all 50 states and the District of Columbia (going one better than his record of 49 states plus DC in 2008), while, as noted, Obama's data-driven approach reaped dividends.

But punditry is amusing, isn't it? And the statisticians' successes seem to imply that much is boringly determined in advance, and that all voters are not equal. Van Kleek, and everyone else in Idaho, are

unimportant, with a mere four electoral college Republican votes guaranteed (this is of course also true of all nonswing states, including giants such as California, New York, and Texas). Bayesian models on extensive datasets look to be all-powerful, but hardly the stuff of what used to be called “political theater.”

Fowler, however, disagrees. “The fun will be in the iterations. We will learn a lot more from experiments with microtargeting at scale. We can see more than average treatment effects. But we’re not robots. We won’t be able to craft a message that affects everything. We are in a competitive space with messages vying for attention.”

The 2012 election was dispiriting at many stages, and relentlessly negative; no sign this time around of what Sarah Palin dubbed Obama’s “hokey-change-y thing.” Yet in many ways, it demonstrated the power of the Web to include – surely a prerequisite for citizenship. And when we consider that the election of Obama was followed a few days later by the “election” of Xi Jinping as General Secretary of the Communist Party (a result expected for more than two years) – an election which was the subject of much online comment by, but little or no influence from, Chinese citizens – we might be tempted to paraphrase Winston Churchill and argue that online democracy is the worst form of government except all the others that have been tried.

In any event, Obama’s success in a close election might be the stimulus to usher us from traditional machine politics to a new world of social machine politics. The trend toward a more expressive mode of citizenship that Bimber identified might just be the catalyst that enables social machines to emerge from the complex dialectic between institutions and individuals. However, the level of organization, leadership, and money

currently required to run social machine politics doesn’t yet allow us to conclude that independent groups of concerned citizens will necessarily be empowered by these developments in the near future. □

Acknowledgments

This work is supported under SOCIAM: The Theory and Practice of Social Machines, funded by the UK Engineering and Physical Sciences Research Council (EPSRC) under grant number EP/J017728/1.

References

1. K. Capobres, “Election 2012: President Obama, Twitter, Break Records,” *Fox News Latino*, 7 Nov. 2012; <http://latino.foxnews.com/latino/news/2012/11/07/election-2012-president-obama-twitter-break-records/>.
2. A. Kirell, “Bill Maher Rips Obama’s Performance Via Twitter: ‘Looks Like He Does Need a Teleprompter,’” *Mediaite*, 4 Oct. 2012; www.mediaite.com/tv/bill-maher-rips-obamas-performance-via-twitter-looks-like-he-does-need-a-teleprompter/.
3. K. Mossberger, C.J. Tolbert, and R.S. McNeal, *Digital Citizenship: The Internet, Society, and Participation*, MIT Press, 2007.
4. R.M. Bond et al., “A 61-Million-Person Experiment in Social Influence and Political Mobilization,” *Nature*, vol. 489, Sept. 2012, pp. 295–298.
5. B.A. Bimber, *Information and American Democracy: Technology in the Evolution of Political Power*, Cambridge Univ. Press, 2003.
6. B. Bimber and Richard Davis, *Campaigning Online: The Internet in US Elections*, Oxford Univ. Press, 2003.
7. L. Rainie and A. Smith, “Politics on Social Networking Sites,” press release, Pew Research Center, 4 Sept. 2012; www.pewinternet.org/Press-Releases/2012/Politics-on-Social-Networking-Sites.aspx.
8. A. Smith and M. Duggan, “The State of the 2012 Election – Mobile Politics,” Pew Research Center, 9 Oct. 2012; www.pewinternet.org/~media/Files/Reports/2012/PIP_State_of_the_2012_race_mobile.pdf.
9. A. Smith and M. Duggan, “Presidential Campaign Donations in the Digital Age,” Pew Research Center, 25 Oct. 2012; www.pewinternet.org/Reports/2012/Election-2012-Donations.aspx.
10. A. Smith and M. Duggan, “Online Politics Videos and Campaign 2012,” Pew Research Center, 2 Nov. 2012; www.pewinternet.org/~media/Files/Reports/2012/PIP_State_of_the_2012_race_online_video_final.pdf.
11. “The Remaking of the President,” *The Economist*, 10 Nov. 2012.
12. M. Scherer, “Inside the Secret World of the Data Crunchers Who Helped Obama Win,” *Time Swampland*, 7 Nov. 2012; <http://swampland.time.com/2012/11/07/inside-the-secret-world-of-quants-and-data-crunchers-who-helped-obama-win/>.
13. N. Singer and C. Duhigg, “Tracking Voters’ Clicks Online to Try to Sway Them,” *New York Times*, 27 Oct. 2012; www.nytimes.com/2012/10/28/us/politics/tracking-clicks-online-to-try-to-sway-voters.html.
14. S. Gallagher, “Inside Team Romney’s Whale of an IT Meltdown,” *Ars Technica*, 9 Nov. 2012; <http://arstechnica.com/information-technology/2012/11/inside-team-romneys-whale-of-an-it-meltdown/>.
15. T. Berners-Lee and M. Fischetti, *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*, Harper Collins, 1999.
16. C. Sunstein, *Republic.com 2.0*, Princeton Univ. Press, 2007.
17. A. Smith, “The Internet and Campaign 2010,” Pew Research Center, 2011; www.pewinternet.org/Reports/2011/The-Internet-and-Campaign-2010.aspx.
18. S. Stephens-Davidowitz, “Google’s Crystal Ball,” *New York Times* blog, 20 Oct. 2012; <http://campaignstops.blogs.nytimes.com/2012/10/20/googles-crystal-ball/>.

Kieron O’Hara is a senior research fellow in the Web and Internet Science Group in the Electronics and Computer Science Department at the University of Southampton. His research interests include trust, privacy, open data, and Web science. O’Hara has a DPhil in philosophy from the University of Oxford. Contact him at kmo@ecs.soton.ac.uk.