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BOOKS & ARTS

New technologies, same old politics

Election campaigns are increasingly being staged online, but digital innovation has brought few new voices into the political debate, explains former parliamentarian **Richard Allan**.

The Myth of Digital Democracy

by Matthew Hindman

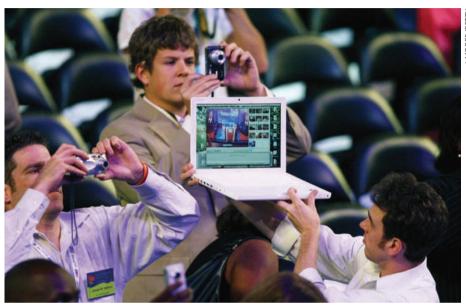
Princeton University Press: 2008. 198 pp. \$22.95, £16.50

Both utopian and dystopian interpretations have been made of the Internet's influence on many spheres of life — and democracy is no exception. Commentators have credited the technology with the power to do everything from destroying representative democracy as we know it, to ushering in a golden age of citizen engagement. Absent from much of this debate is evidence-based analysis of the effects of the Internet on the business of politics. Many theories have been built on nothing more than anecdote, inference and assertion.

In *The Myth of Digital Democracy*, political scientist Matthew Hindman fills important gaps in the evidence base, and does so accessibly. The title might suggest that he argues that the Internet has little influence on politics, but his analysis is much richer than a simple contradiction of the utopian end of the spectrum. Hindman addresses two key questions about digital democracy: what does the Internet do to the day-to-day business of politics, and how does it affect the distribution of powerful political voices?

Digital technologies are changing the business of politics by opening up new avenues for fundraising and communications, and thus altering the infrastructure of political campaigns. Websites allow money to be raised from a broader support base; e-mail and social-networking techniques can be used to organize people around campaign activities. Hindman draws his evidence largely from Howard Dean's high-profile use of the Internet in his attempt to secure the US Democratic Party's nomination for presidential candidate in 2004. Analysis of Barack Obama's recent campaign is included, although the campaign was just getting under way when the book was being written.

Today, digital campaigning is considered effective and essential for any political party's success. This is a far cry from the early 'brochureware' days, when a candidate would derive more electoral value from the traditional media coverage of their website launch than from anything they did online. Although political campaigns still depend on the 'highstreet' model of traditional media and local



The Internet opens up avenues for campaigning, but traditional media sources dominate.

infrastructure, evidence confirms that digital technology is useful in supporting this.

Hindman observes, from both the Dean and Obama campaigns, that online activities may be even more significant in a US presidential election than in others because of the primary system. During the early stages of a primary battle, the candidates do not have access to the party's high-street infrastructure and so depend more on digital techniques. Online fundraising, endorsement videos and socialmedia supporter networks can create a sense of momentum that will in turn be reported in more traditional media.

Most of Hindman's book is directed towards the second, more significant, question of whether digital technologies change the balance of powerful political voices. There is much interest in whether the Internet can empower groups, such as younger people, who are seen as disengaged from the traditional political process. Hindman's answer is in line with the 'myth' of his book title: political voices remain heavily filtered and concentrated on the Internet.

Using data from automated tools that analyse links between websites, Hindman demonstrates that search engines have a powerful effect in concentrating the sites that people visit to find political information. This is because a small number of sites consistently rise to the top of search lists because they have many links from

other sites, and incoming links are used to assign priority by search algorithms. Political influence will be strongest in this handful of heavily linked websites, many of which belong to traditional media organizations. These will therefore continue to be of most interest to politicians.

Website traffic analysis by the company Hitwise reveals that few people visit specialized political sites, indicating that these are less significant than mainstream news sites. Hindman then looks at blogs, showing that a small number of new players with influential political voices have entered the media space. But these are very few; the majority of bloggers have little influence and the successful ones are less diverse than might be assumed.

The book does not address all the potential democratic applications for digital technology, such as viral e-mail marketing and social networking, which are being looked at by other scholars. In each case we need to avoid being dazzled by digital 'magic' and analyse, as Hindman does, whether innovation is really leading to qualitative changes in the political process.

The Internet has already become embedded in politics in a number of countries: in Estonia, for instance, there is a major online component to the whole democratic process, including voting. Many smaller political organizations, including some on the extremist fringes, are innovating with digital technologies to build

campaigns quickly and cheaply. Yet presidential elections in the United States continue to be major landmarks in this area because of their vast campaign budgets, global media attention and the availability of cutting-edge expertise donated by employees of the major US-based Internet companies.

Political parties everywhere have great interest in digital campaigns, especially on the back

of Obama's success; it is now recognized that online activity has moved from an optional extra to an essential element of campaigning. These campaigns may bring different supporters, donors and activists into the political process. We would be right, however, to follow the considered approach of this book in not assuming that enhanced automation of campaigns will effect significant changes in political power.

Based on current evidence, any claims that we are reaching a digitally powered democratic Utopia are indeed more myth than reality.

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Science for the greater economic good

Tapping the Riches of Science: Universities and the Promise of Economic Growth by Roger L. Geiger and Creso M. Sá Harvard University Press: 2009. 262 pp. \$39.95, £29.95

When I moved back to Cambridge, UK, in 2002 after a 21-year absence, the biggest difference I noticed was the high house prices in the city centre. These reflected the high earnings, not of senior academics but of businessmen, some millionaires, working in the surrounding science parks. The university had changed little, but spin-out companies, entrepreneurialism and wealth generation brought real-world concerns closer to the ivory tower. A 2006 study (see http://tinyurl.com/bv8xk6) concluded that if the university disappeared, 77,000 local jobs and a net value in the region of £21 billion (US\$29.5 billion) would go with it.

Tapping the Riches of Science looks at how universities in the United States have similarly become important generators of local and national economic growth. The Bayh-Dole Act of 1980 gave universities the ownership of intellectual property generated by federal research grants, and the responsibility for exploiting that intellectual property. Such roles have been largely viewed with suspicion. Derek Bok, former president of Harvard University, wrote in *Universities in the Marketplace* (Princeton University Press, 2003) that universities were becoming the handmaidens of football leagues, pharmaceutical industries and online providers of education. In Science For Sale (University of Chicago Press, 2007), Daniel Greenberg stressed the conflicts of interest between faculty and the pharmaceutical and biomedical industries.

With its dispassionate analysis, *Tapping the Riches of Science* is welcome. It includes the upsides and downsides of the rise of economic development, which has become the fourth mission of US universities after teaching, research and outreach. Authors Roger Geiger and Creso Sá emphasize that universities are in the driving seat and stand to benefit most



Innovations by university researchers, such as this rapid visual test for HIV, are crucial to economic growth.

from links to industry: "The universities of the twenty-first century have essentially exploited the opportunities inherent in economic relevance to garner increased resources from both industry and government."

Geiger and Sá point out that university research has long driven economic growth in the United States. After the Hatch Act of 1887, federal funds allocated to land-grant colleges and universities established agricultural research centres. As a university mission, technology transfer became entrenched after 1945, with defence-related labs being formed at the Massachusetts Institute of Technology and the University of California, Berkeley, among others. Intriguingly, it is the campuses that gained experience of working with industry and the military that embraced the economic agenda earliest; Yale University and Harvard University were among the last. Health science also enjoyed rapid expansion in parallel with the growth of the US National Institutes of Health.

In recent years, universities have come to be viewed as small but vital players in the national innovation system. The twin paths of innovation — the support of large corporations through licensing agreements, and the incubation of new industries through spin-outs and start-ups — have provided challenges in their interactions on campus, including questions over ownership of intellectual property, conflicts of interest and debates about subsidized access to labs. Many early partnerships were the result of enterprising senior individuals, but as these linkages have grown, institution-wide adjustments have become necessary to accommodate them.

The idea that universities will 'get rich quick' through the exploitation of their own intellectual property has been replaced by a more realistic view of the 'public good' element of local economic growth. The dichotomy between public and private, between seeking profit and crystallizing the value of what was originally public-good research will remain a source of debate, but we are now over the naive hurdle that the two cannot mix.

The relationship between business and the academic core is fascinating, affecting the development of disciplines and the appointment of faculty. The formation and governance