Using the Web in the democratic process.* The Web-orchestrated 'Stop the Overlay' cyber-campaign

W I L L I A M H . D U T T O N and W A N - Y I N G L I N

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In the 1996 US Presidential elections, new information and communication technologies (ICTs), particularly the Internet and World Wide Web (Web), began to play a visible role in US campaigns and elections, and its role has expanded to shape the political process more generally. Case studies have shown how the Web, for example, can facilitate the rapid exchange of information that is essential to coordinating political activity. By virtue of reducing the costs of communication, it has become accessible to grassroots organisations without the resources to mount more traditional media campaigns. This study looks in-depth at one campaign – Stop the Overlay – which employed the Internet and Web to effect public policy and regulatory change locally, but with implications for California and the US. Our study led us to employ the framework of an ecology of games to discuss the interplay among the separate but interdependent decisions and games that shaped the campaign. The case shows how this Web-orchestrated campaign was one element that reconfigured the ecology of games in ways that influenced policy decisions. It accomplished this not only by altering the costs of communication, but by reshaping access and thereby changing the networks of communication among political actors.

For decades, proponents of electronic democracy have heralded the potential for computer-based information and communication technologies (ICTs) to support more democratic political participation.[1] However, it has only been with the widespread diffusion of the Internet and World Wide Web (Web) that a growing number of anecdotal accounts and empirical studies have claimed a significant role for new ICTs in the political process–one that might eventually rival the press and television. For example, by reducing the cost of distributing information and communicating over distance and time, the Internet can facilitate

the recruitment of volunteers, the solicitation of donations, and the mobilising of constituencies, as suggested in the rise in number and significance of grassroots political movements (Bimber, 1998; Rosenstone & Hansen, 1993; Wittig, 1996 Tsagarousianou, Tambini, & Bryan. 1998).

The role of the Web?

The mobilisation of groups in itself represents a fundamental progress for pluralist democracies. Nevertheless, very few studies have examined the extent to which Internet-based political action can carry through to effect policy, and under what circumstances (Bimber, 1998). As more politicians and citizens begin to perceive the Internet and Web as a valuable political tool, it is important that social scientists critically examine their underlying assumptions and develop explanations for the role these new ICTs play in the political process.

This research issue was one major reason we chose to study a Web-orchestrated campaign that appeared to succeed in stopping the imposition of a new area code overlay for the western region of the County of Los Angeles, California. The media eventually labelled this mobilisation a pubic 'uprising' (Douglas 2000; Douglas & Shiver, 2000). A secondary, but critical motivation behind the choice of this case was personal access to some of the key campaign organisers.

We were intrigued by other attributes of this campaign. First, the issue of a telephone area code overlay is not a life or death issue, but essentially one of convenience. Why might a successful 'uprising' emerge around a debate over how many numbers to dial, or punch on a pad?

Secondly, area code assignment is a relatively technical issue of regulation. Few people knew what an area code overlay was (which we will explain below), and fewer still understood why it was needed, if indeed it was, since its necessity was clouded by complex proprietary, technical and regulatory issues. For both these reasons. conflict over a new area code for West Los Angeles hardly seemed to be the grist for a public uprising.

Thirdly, the campaign's geography countered our initial expectations of when the Internet and Web would be most critical. The 'Stop the Overlay' campaign appeared to be a relatively local organisation effort, focused on a local issue. This caused us to look more systematically at the geography of Internet campaigns as a means for placing our case study in a more general context.

Types of Web campaigns: the geography of politics online

Internet and Web-orchestrated political action encompass many different kinds of campaign. Typology of Web-orchestrated campaigns can be based on the degree to which their organisers and the targets of their activities are localised or distributed, yielding four ideal types, for which we have suggested some real world examples.

A number of prominent Web-action sites bring together geographically distributed organisers to focus on action dispersed round the country, if not the world. Launched in 1998, E-the People (www.e-thepeople.com) has been called America's Interactive Town Hall. It

seeks to connect citizens to public officials at all levels of government. whether to report a local problem, like a pothole in the street. or present their views on national policy issues. Another 'dotcom' organisation, Grassroots.com provides a facility for local grassroots groups anywhere to organise around any issue. Other sites that can be used by local organisations include PetitionOnline.com, which encourages individuals to create their own petitions on topics of their choice. There are also Web-sites linked to specific petitions, such as Citizens for a Sound Economy (www.cse.org).

Another type of Web-site is used by a specific group to organise action across a broad area. Some online petition sites, such as the Move-On campaign, fall into this category. Initiated almost overnight, in late 1998, the group sought to use the Web to get Congress to "censure President Clinton and move on" (Healy, 1999). Likewise, Wang Dan, a student leader of the Tiananmen Square protests in 1989, who resides in the US, created a petition site at www.june4.org Wang Dan sought to collect signatures from around the world in an effort to send a pro-democracy signal to Beijing. Another ongoing petition drive on www.WenHoLee.org has been used in an attempt to convince the US Attorney General, Janet Reno to free Lee Wen Ho, a naturalised US citizen from Taiwan, and former nuclear code developer within Los Alamos' top-secret X-division. He was jailed for allegedly copying decades of classified data onto portable tapes, including some that remain missing. Asian Americans have led the campaign to free him, claiming that he was singled out because of his ethnicity.[2]

In contrast to these broad, often global appeals, some Web-campaigns are aimed at more local targets. One type of locally targeted campaign can be organised by a geographically distributed group. For example, the protest against the World Trade Organisation (WTO) 1999 Summit in Seattle fits this type –a distributed organisation focused on a local action. It began with a message sent in January 1999 by the Public Citizens' Global Trade Watch, a lead organiser of the protests: "We're going to Seattle at the end of November." Soon there were dozens of "listservs," i.e., e-mail discussion groups, devoted to discussing ways to disrupt the meeting. By autumn 1999, a Web site, www.seattle99.org was put up to help organise volunteers, distribute fliers, provide directions, and even assist protesters find lodging in Seattle. A similar effort was focused on the World Bank and the International Monetary Fund 2000 Convention in Washington D.C.

A final type, which characterises the present study, can be organised locally to address a relatively local issue. For example, a group in Toledo, Ohio, created a Web-site (RecallCarty.com) in 1999 to recall Mayor Carty Finkbeiner. A more traditional campaign of 1995 to recall Mayor Finkbeiner generated only a few hundred signatures, compared with more than 9,500 confirmed signatures generated online in 1999 and within the span of only two months. A similar case on another continent was a petition against a Taipei City Councillor. S. K. Yen, in May 1999. After her election, and while receiving a salary as a Taipei official, Yen was residing in the US, studying for her doctorate at the University of Chicago. After Councillor Yen refused to suspend her studies to fulfil the duties of her office, the Green Party of Taiwan launched a recall campaign. This campaign started in a traditional manner, relying on petition forms distributed in such public places as supermarkets and metro stations, until the petitioners were physically intimidated by supporters of Yen. The petitioners turned to the Web and Internet and generated enough signatures within two weeks to launch the recall.

A focus on 'Stop the Overlay'

Many more examples of the use of the Web in politics are available. However. very few studies assess the extent to which the Web per se was critical to these activities. and whether, in fact, these campaigns successfully achieved their goals. For example, in the WTO protest, campaigners did attract worldwide attention through mass media and potentially increased public awareness, but any eventual implications on actual policy is far more difficult to assess. Similarly, the June 4 Global Petition may have sent a pro-democracy message to Beijing, but with what effect? In its aftermath, China's government shut down around 300 cyber-cafes one week before the 10th anniversary of the Tiananmen Square massacre.

We will begin with an overview of the Stop the Overlay campaign, and then turn to a discussion of several general patterns and themes that emerged from this case. These concern the often marginal, but significant ways in which the Internet and Web influenced the course of political actions by reconfiguring access to information, people, services, and technology (Dutton, 1999). By virtue of the Web's role in reshaping access, the Web changed the communication networks among key political actors in ways that are not explained simply by efficiency or effectiveness, such as focusing on the declining cost of communication. On the one hand, the Web altered the geography of access, as well as the networks of communication, in ways that enhanced this campaign. On the other hand, the ad hoc nature of the political network it supported leaves concerns over the durability and fragility of these networks in the face of more institutionalised opposition. By understanding politics as an ecology of games. we suggest, the role of the Internet and Web in reconfiguring this ecology becomes central to explanations of its political significance.

The Stop the Overlay campaign

Most concretely, this Web-orchestrated campaign in Los Angeles, California, sought to block the creation of a new telephone area code (424) that was to be superimposed on the geographical jurisdiction of an existing area code (310). That is, rather than split the geographical region of the West Los Angeles area (Westside), which was covered by the area code 310, the State of California's Public Utility Commission (PUC) agreed to superimpose a new area code 424 over the same geographic area covered by 310. The creation of this 'overlay' would mean the doubling of telephone numbers. However, as planned, it would also mean that telephone subscribers would need to dial (or punch) 11 digits (1 + area code + phone number) even if they are calling their next-door neighbours.

The geography of area codes in Los Angeles

The area code 310 was first introduced in 1992 to relieve a shortage of telephone numbers in Los Angeles County. Many phone companies all over the country have been adding area codes for years, often by splitting existing areas, but sometimes by overlaying codes. The telephone companies' most common rationale for additional area codes has been a purported 'number shortage' due to the rapid growth of multiple phone lines per household, as well as the diffusion of faxes. pagers, computer modems, and cellular phones (e.g., Pacific Bell, 1998).

The 310 area code was formed by a split from area code 213. which separated much of the Westside of the County from the central business district of the City of Los Angeles, which retained the 213 area code. This 310 area included some of the wealthier cities and areas of Los Angeles County, including Beverly Hills, Malibu, Santa Monica, and south to the beach cities and Palos Verdes peninsula. Within five years. increasing demand for telephone numbers in the 310 area led the phone companies to request a split of 3l0 by creating a new 562 area. In 1999, less than two years from the creation of the 562 code, the local phone companies claimed to be running out of phone numbers once again. However, instead of calling for an area code split, the phone company proposed to implement the 310/424 overlay. One reason for proposing an overlay, rather than a split, is that many households, and small businesses would prefer to keep their current phone numbers intact with an overlay. They would not need to reprint stationery, update their customer-contact databases, or even risk losing old customers who do not have their new area code.

Overlays had been implemented in cities in Maryland, New York, Texas, Georgia, Florida and Colorado, among others, with only limited consumer protests. However, consumer protests did erupt and some persisted in New York City and some Midwestern cities. Compared with other states, California has had more area codes and experienced a higher rate of area code splits. From 1947 to 1992, for example, the number of area codes in California grew from three to thirteen (PUC, 1999). During the subsequent seven years, the number nearly doubled, with 25 area codes in place by the end of 1999. The PUC expected to open 15 more area codes by 2002, unless conservation measures were put in place.

Early reaction

Telephone numbers are not only memorised by individuals, but are also embedded within technologies, address books, speed dialers, and data bases. They can become an aspect of one's identity, maybe even a symbol of one's status within a community, such as signifying a long time resident. For such reasons, changes in phone numbers, like a new area code, can be frustrating, inconvenient, and costly to consumers and businesses.

In West Los Angeles, many residents were understood to be unhappy about the impending overlay, but generally resigned to it. What could they do? They were not aware of being asked their opinion, but only told that this overlay had to be done, and that they should prepare for it. However, a few individuals saw this to be more than an issue of convenience and quickly became absorbed in a Web-orchestrated campaign to defeat the overlay. The three core actors were an unlikely combination of a newspaper columnist, a plastic surgeon, and a Web-savvy computer user. A defining moment in launching the Stop the Overlay campaign was when Dr. Steven Teitelbaum, a plastic surgeon based in Santa Monica, received a form letter from his local phone company. The letter informed him that he was entering a 'permissive' period in which seven-digit dialing would be allowed, but that he should start practicing 11-digit dialing to get ready for something called the 'overlay'. Steven Teitelbaum (personal communication, 2000), felt the letter was condescending in tone, and was upset by his sense that neither he nor anyone else he knew had been well informed or involved in the decision to impose this overlay. He was so upset that he scrawled the message "BULL" across the top of the letter and faxed it to his friend, Robert Scheer, a columnist of the *Los Angeles Times* and a professor at the

Annenberg School for Communication at the University of Southern California in Los Angeles.[3] His handwritten note across the letter asked Bob Scheer what this was all about and whether Bob would look into this matter. A nationally syndicated columnist, Scheer also contributed a regular column to *Our Times*, a local Santa Monica/Westside edition of *The Los Angeles Times*.

Bob Scheer had studied engineering as an undergraduate and found himself tracking technology issues from time to time, such as during debate over the 1996 Telecommunications Act, when he was a reporter in Washington D.C. He felt many reporters were not trained well in science or engineering, could be intimidated by technical issues, and therefore tended to take what the telecommunication companies and regulators said at face value. He understood enough about electronics and telecommunications to ask the right questions and know when he was not being given a reasonable answer (R. Scheer, personal communication 2000). Scheer's phone calls convinced him that there was a lack of public accountability in the process of developing and implementing the overlay. It was the outcome of industry meetings, which determined that a shortage existed and that an area code split or overlay was required. Members of the PUC were permitted to attend these industry meetings, but they were not allowed to vote. Moreover, the most important data was not available to the PUC, such as what percentage of telephone numbers, which were allocated free of charge to the phone companies, had actually been distributed to customers. Without this information, the public could not know if a real shortage existed. But this information was considered proprietary by the phone companies, since it could be used by competitors to assess the rate of new subscriptions. Furthermore, there was no mechanism for the phone companies to provide a return of numbers that were unused.

Josh Fouts, a Culver City resident and telephone subscriber on the West Side was annoyed by the overlay, and intrigued by Scheer's editorials. He initially dismissed the problem as a relatively minor issue of convenience; however, his wife, Jacki Weber, also a computer consultant, discussed the issue with him, convincing him the real issue was not the overlay per se, but the degree to which the public was being asked to pay a price for the ease and convenience of the telephone industry and the PUC. The public seemed to take on all the burdens of this policy, and without much recourse. As he began to see this as an issue of consumer sovereignty, he became motivated to get involved.

As he began to learn more about Scheer and Teitelbaum's efforts he raised the idea of creating a Web page for the campaign. Teitelbaum agreed to finance the Web campaign, which amounted to $67 for the bulletin board software and $40 per month for their dotcom Web site account. Scheer agreed to provide his editorials and reporting on the overlay, and Fouts, with help from Jacki Weber, volunteered to set up and manage the Web-site. The first version of the site was simple and was set up in about 24 hours of focused effort.

Scheer (1999a) felt the Web site, www.stopoverlay.com, became an "indispensable outlet for consumers and the rallying point for countering the enormous pressure of the lavishly financed telecommunications lobbyists." A theme of the Web site reflected Fouts's own motivation in that citizens were called to action not only to eliminate the inconvenience an overlay might cause, but also, and more importantly, to make the phone companies accountable to the public. As one resident commented after she attended a town meeting: "I was alarmed to hear speaker after speaker still going around the overlay vs. new prefix question, as though

it was a valid choice. We have been brainwashed into thinking those were our only choices. They are NOT."

These kinds of reactions from the public contributed to maintaining and enlarging the campaign. Bob Scheer covered many issues through his *Our Times* column. He was sensitive to the feedback of his readers, and often let issues die if they did not generate interest or invited a mixed response. His initial article on the area code issue was met with a comparatively strong and positive response from readers, encouraging Scheer to continue writing on the number shortage 'myth' (Scheer, 1999b). The Web site Stopoverlay.com – was an instant success. The site was first publicised through the newspaper and Bob Scheer continued to remind readers of the site in his column. Quickly, the site gained in traffic. In May, soon after its launch, page viewing reached a peak at nearly 9,000 requests. Over time the hits decreased but stayed over 4,000 per month until August.

The homepage of the Web site functioned as a "news alert", informing viewers of recent developments in the campaign and calling for real-time help, whenever necessary. The site collected, archived and posted all news clippings on this issue. provided detailed fact sheets, and not only urged people to take action, but explained how they could act. For example, the site listed the names and contact information of key elected and appointed public officials, and official representatives of the local phone companies. Hyper-links were embedded that enabled those visiting the Web site to voice their concerns to the targeted individuals simply by clicking a mouse button.

The Web site was augmented in July, when Fouts created an e-mail distribution list that visitors to the site could join. The list was used to send e-mail regular updates to this targeted list of subscribers. For example, the distribution list was used to call for action in the days before the PUC was about to vote on a proposal that would determine whether the overlay would take effect.

Interactivity was supported through the site in ways beyond the distribution list. The message board on the Web provided an "e-soapbox" for the public. The message board was used to post general announcements, deal with technical questions, and monitor the overlay legislation and relevant campaign or industry news. The forum also opened up a section for gossip and rumours. The Web site and related distribution list were key tools for orchestrating the actions of Westside residents. lt was when the group launched 'www.stopoverlay.com' in May 1999 that West Los Angeles residents appeared to reach a critical mass and began to act collectively. Many credited the Web also with helping the campaign to build awareness of the issue, particularly among politicians, from the local city halls to Sacramento and Washington DC.

In addition, the Web site's access logs were of value to the organisers in discovering the growing visibility of their campaign. They could see from the logs when their site began to attract 'new' audiences, such as the general public on AOL, Internet users from the City of Los Angeles, the telephone companies, such as Pacific Bell and GTE, public officials in Sacramento, and eventually users from the Federal Communication Commission. All began to track Stopoverlay.com.

Legislative action

Independently of the Stop the Overlay campaign, a surge of consumer complaints from

constituents, -led State Assemblyman Wally Knox, a Democrat from Los Angeles, and U.S. Representative Henry Waxman, also a Democrat from Los Angeles, to file a petition with California regulators to halt the area code overlay on June 10 1999. Assemblyman Knox signed as the lead petitioner to the PUC. He argued that the popularity of cell phones, pagers, and fax machines was not the full reason for this proliferation of area codes. He attributed it also to industry number hoarding, deregulation of the industry, and faulty demand projections. He found a ready ally in Bob Scheer and his colleagues. Inspired and supported by demonstrated citizen interest, he introduced the California State Assembly Bill 406 (AB 406), an area code reform bill, that later became known as the Consumer Area Code Relief Act of 1999. AB 406 was designed to force state public utility regulators and telephone companies to adopt telephone number conservation measures before an area code split or overlay could be implemented. One PUC (2000) report estimated that at least 3 million unused numbers existed in the 310 area code, and approximately 2.7 million were held by carriers.

Days before the vote on AB 406, Knox organised the "Big Hang-Up" protest of 31 August 1999. Residents were asked to hang up their phone from 3:10 p.m. for one hour to "silently" protest the phone companies' manipulation of area codes. The event captured wide press coverage including the *Los Angeles Times* and four major local television stations, which helped to highlight the issue and the proposed legislation.

Hours before AB 406 was up for a vote in the Assembly, Bob Scheer used his cell phone to call virtually every voting member of the Assembly rumoured to be against the Bill. He was able to get through to nearly everyone, since he was a well-known journalist. His approach was direct: "Look. I write a column for the *Los Angeles Times*. I want to know why you are voting against the Bill." Surprised to receive a call like this, some explained that their opposition centred on a particular paragraph in the bill. With Assemblyman Knox taking the lead, the "poisonous paragraph" was taken out thirty minutes before the vote (Scheer, personal interview). AB 406 was passed by a near-unanimous vote (79:1) on September 9, 1999.

Up the federal structure

The US federal government structure has made state and local officials more significant actors in the politics of cable and telecommunication matters than are local governments in many other nations, such as Britain, where local authorities have virtually no involvement. In the case of area code assignments, however, the PUC's regulatory authority over the local exchange carriers in this area was constrained. The uproar over the 310/424 overlay in Los Angeles was to the advantage of some members of the PUC who were working to gain more local authority as it lent public support to the PUC's Petition for Additional Delegated Authority to the FCC in April 23, 1999. Five months after this petition was filed, the FCC ruled that the PUC be granted. with conditions, the authority to mandate that the phone companies adopt number conservation measures before an overlay plan could be implemented. The PUC was thereby authorised to institute thousand-block pooling trials; establish usage thresholds, including requiring carriers to submit number utilisation data; reclaim unused and reserved codes; require sequential number assignments; and hear and address claims of carriers requesting numbering resources outside of rationing procedures (FCC, 1999).

Back to the PUC

The PUC had yet to rule on the 310/424 overlay. Among the five Commissioners, one, Joel Hyatt was expected to vote in favour of blocking the overlay, as it was his own proposal, and, another, Carl Wood was expected to support him. Another Commissioner, Josiah Neeper, was thought to be opposed and impossible to sway. This left two undecided Commissioners. Henry Duque and Richard Bilas, and the Stop the Overlay campaign used its distribution list to ask subscribers to focus their efforts on them. The public was directed also to contact Governor Gray Davis, since he was being urged by telephone company lobbyists to not sign AB 406, if it arrived at his desk.

Facing consumer opposition, a favourable FCC ruling, and the passage of AB 406, the PUC voted 'No' to the overlay on September 16, 1999. This effectively killed the overlay and on the homepage of the Stop the Overlay Web site, Robert Scheer reflected the mood of the campaign: "It is a victory for grass-roots activism in the Internet age, where a local paper like Our Times reached a much wider audience thanks to www.stopoverlay.com."

The struggle does not end

Stopoverlay.com continued to attract thousands of visits. Users revisited the site to check information regarding the detail of the PUC decision and to share the joy of their success. lt was not until October that the page requests began to decline rapidly. The public uprising was over, but further reforms of area code administration continued, with the FCC granting a waiver to permit phone numbers to be allocated in blocks of 1,000 (vs 10,000) within the 310 area, and later introducing this as a nationwide strategy for conserving numbers (Douglas & Shiver, 2000).

However, the issue has not been resolved and the long-term outcome of this struggle over area code policy remains uncertain. Nearly a year later, in a letter to the FCC, telephone companies serving California requested the FCC to force California PUC to permit 12 new area codes, including 6 within the Greater Los Angeles area (Douglas, 2000). The long-term role of the Web-orchestrated campaign remains problematic, since it may be more difficult to reorganise and sustain opposition over time against well organised companies with institutionalised mechanisms for sustaining their activity in politics and public policy.

Perspectives on the dynamics of a Web-orchestrated all-media campaign

Our study of the role of a Web-campaign opposing the 310/424 overlay lends support to the claims of participants of its significance. lt contributed to the success of this campaign, and helps to explain why opposition by other consumers in other areas to similar area code changes have not been as successful. However, several themes that emerged from this case might be of more general value than any verdict on the independent effect of this site within the array of forces opposed to the overlay. This case study reinforces themes of other research on ICTs in politics and society, and also raises some points that are not as well developed in the literature.

The Web of media on all channels

One of the strongest themes in this case study was the degree to which the effectiveness of the Web was dependent on the use of all media, The Internet and Web were of value to a large degree because they reinforced and complemented other media. This was apparent from the moment that Teitelbaum faxed Bob Scheer the letter from his phone company, but it can be illustrated in several more general ways.

First, the Internet and the Web created an alternative channel for reaching the public that bypassed traditional gatekeepers. This may be a conventional view of online news, but it had real significance in this case. For example, the *Los Angeles Times* generally failed to cover the public opposition to the overlay until the later stages of the 'uprising'. Scheer was able to cover the story in his own column within a local Santa Monica edition of the *Los Angeles Times*, but metropolitan-wide coverage was muted. A second, and related impact, was the degree to which the Web changed the geography of access to stories about the overlay. *Our Times* was a local community newspaper. lt was not until the phone companies, Sacramento politicians and members of the FCC started looking at Stopoverlay.com that they could get ready access to Bob Scheer's articles in *Our Times*. Thirdly, and most generally, the entire Web strategy was anchored in the use of all channels of communication. A key attribute of the Web page. for example, was the set of instructions on who to call, write, visit, or e-mail about opposition to the overlay. The Web helped generate phone calls, e-mails, and letters to politicians. The Web and phone systems were used to create the Big Hang-Up protest, which was successful in gaining TV news coverage for the campaign.

Reconfiguring Access

One of the major social implications of ICTs is the degree to which they reshape access to information, people, services and technology (Dutton, 1999: 4–6).[4] They not only change how you get access to these resources, but also shape and reshape what, when and where things are done and what you know, who you know, and what you consume. Much discussion of the political role of the Internet and Web focuses on such long-term consequences as power and democracy, but the closer and more direct implications for reconfiguring access provide a more concrete focus for research that can be used to speculate on longer-range implications.

The most common argument is that the low relative cost of the Internet will drive more communication online and will facilitate more interaction among players and thereby support collective behaviour. This case suggests that the impact of the Internet is not only to change the way participants communicate with one another, or even the frequency of communication as well, but to actually reconfigure the networks of communication. The Internet changed who knew what, and who communicated with whom, it reconfigured access.

In the social network before the Web was adopted in the campaign strong ties were seen between local phone companies and regulatory agencies. Regulatory bodies had connections among themselves, even though their interaction might have often been routine. On the other hand, Scheer had a personal friendship with Teitelbaum and Fouts, while Teitelbaum and Fouts did not know each other or many other Westside residents at the outset. As a journalist, Scheer

managed to reach Westside residents via his column. Nevertheless residents had virtually no interaction with the PUC or the FCC.

The Internet changed the whole network, Westside residents including the principal activists, were all glued together within a communication network. Despite the fact that local phone companies still kept good linkages with regulatory agencies and officials, consumer activists also managed to contact public officials frequently and efficiently. In other words, the Internet facilitated an existing network, it further extended the network and connected different segments of social structure not easily integrated in terms of primary groups, and thus facilitated mobilisation. In this case, it helped foster a favourable outcome, in line with the intentions of those who organised the campaign.

One approach to understanding the importance of 'reshaping access' in politics and public policy is by viewing policy as the outcome of an ecology of games.[5] The ecology of games is a concept that focuses attention on the interplay among the separate but interdependent decisions and games that shape decisions and their outcomes. The metaphor of a game helps see actors as purposive players in a variety of activities defined by their own rules and assumptions in trying to achieve particular goals. Every actor is involved in one or more "games", arenas of competition and co-operation structured by a set of rules and assumptions about how to act in order to achieve a particular set of objectives) within a broader ecology of games. This is a system of action composed of two or more separate but interdependent games (Dutton, 1992). This ecology shapes the design and development of the political action in ways that often seem irrational or unanticipated only if seen from the perspective of one game. The framework provides a set of concepts, or a grammar for describing and explaining the collective action based upon the objectives and strategies of individuals, rather than on a globally rational choice of the collective as a whole.

The Stop the Overlay campaign can be viewed as one game within a much broader ecology of games. Like all games, the effort to Stop the Overlay shares several key characteristics (Dutton, 1992). First, every game has a set of goals or objectives. Of course, games may have one single objective but others may have multiple goals, as did this campaign which also sought to empower consumers and defeat the phone company lobbyists. Second, a game has a set of prizes, in the cases of Scheer, Teitelbaum and Fouts, for example, the prizes associated with stopping the overlay might have been a sense of fulfilment, rather than a higher salary or larger office, but they need not be tangible. Third, games have rules that govern the strategies or moves open to players. In the Stop the Overlay campaign, the rules might be public and fair, established by the FCC, PUC, and the State Legislature. The rules may change over time, such as when the venue moves from the legislature to the PUC, and there may not even be consensus on the rules of the game, as when Scheer seemed to threaten opponents with public exposure (Crozier & Friedberg, 1980). Finally, a game has a set of players, defined by the fact that they interact (compete or co-operate) with one another in pursuing the game's objectives, as in this case.

The Stop the Overlay campaign was one of many consumer efforts to block or effect proposed changes in area codes around the country. In the West Los Angeles campaign i.e., Scheer and his colleagues redefined the issues to encompass games beyond a simple area code game. lt was an issue of democratic accountability, ie, consumer rights and corporate profit vs the public interest; thus, Scheer coupled the area code campaign to a broader and more potent

citizen (consumer) sovereignty game. This game cuts across many areas of everyday life, and raises issues over whether consumers are adequately informed and influential in the formation of government policy and regulations. Likewise, a more partisan, ideological game was also relevant which set some of the more liberal Democrats on the staff within the PUC against some of the more conservative Republican appointed Commissioners, with these staff perceiving the appointed officials as too responsive to the telecommunications industry, and not as receptive as they should be to public concerns. For example, some staff in the Commission were also frustrated that they had not been empowered to investigate whether numbers were used in an efficient manner. They were barred by law from obtaining this data, since it was judged to be proprietary and useful to a company's competitors. And they were barred by law from getting unused numbers back. In this case, the Stop the Overlay campaign gave legitimacy to one side in the more internal bureaucratic struggle, which might have otherwise floundered.

Across the country, State Public Utilities Commissions have moved to require ten-digit dialing (11 digits counting the 1 required before the area code), when an overlay area code is introduced. The rationale is to prevent the incumbent providers of telecommunications services in an area, who generally hold a large proportion of the numbers available in the pre-existing area code, to have a competitive advantage over new entrants in a market. That way, new entrants will not draw most of their numbers from less familiar codes. Thus, requiring ten-digit dialing for all local calls avoids the potentially anti-competitive effect of area code overlays (PUC, 2000). By advocating number conservation measures, and not calling for a technical fix, such as not requiring existing 310 households to dial additional digits, the campaign did not favour competition.

The Web did not simply reduce the costs of organising a campaign. since these are largely communication costs, and thus enhance communication among players in the game. The process of communication increases the likelihood of collective behaviour by contributing to the building of trust and a sense of community, to the accumulation of social capital, and the formation of social networks (e.g., Cason & Khan, 1999; Macy, 1991; Macy & Flache, 1995; McPherson & Smith-Lovin, 1987). Social ties facilitate political organisation in two ways. The strong tie argument, which is well grounded in network theory, suggests that the more intense the interaction, the higher the likelihood of participation (e.g., Krackhardt, 1992; Macy, 1991; Oliver, 1993). On the other hand, weak ties are those connections that are low in communication frequency, short in duration, low in intimacy, and less likely to implicate reciprocal activities. They are capable, however. of bridging two otherwise unrelated networks (Granovetter, 1973). Through computer simulations, Macy (1991) found that weak ties as well as strong ties have a positive effect on collective action.

Organisation begets organisation

The greatest flaw in the power of any organised group is the tendency for organised groups to generate opposing groups. Organisation begets organisation. In this case, however, there was really no organised opposition to the Stop the Overlay campaign, beyond the industry and its lobbyists. Industry can appeal to the public for support. For example. the anti-trust case of the US Department of Justice against Microsoft has been fought in part through

citizen-consumer groups. Many consumer and computer users groups have been critical of Microsoft, but the company has put together its own consumer/shareholder movement, its Freedom to Innovate Network (FIN). The company appealed directly to shareholders and consumers saying that it created FIN "to provide an effective method for you [shareholders] and other concerned citizens to communicate directly with government officials" (Gates, 2000). The telephone industry did not take a comparable approach in trying to encourage citizen opposition to the Stop the Overlay campaign.

Conclusion

The Stop the Overlay campaign attributed much of its success to the Web, which was said to have connected an otherwise fragmented group of citizens and facilitated their collective action. Our study underscored the significant role of the Web in the success of the campaign, but also highlighted several themes that could be relevant to the study of other cyber-campaigns, including the degree to which the Web was used to orchestrate a more multi-media campaign, and the value of the Web and other media in reshaping the ecology of games surrounding the overlay. The Stop the Overlay campaign was successful in reconfiguring this ecology of games in two ways. First, the organisers redefined the issues at stake. The phone companies had defined the issue as whether to split or overlay area codes to create more phone numbers. The campaign organisers redefined the issues to focus on stopping any change, forcing the phone companies to conserve numbers, and getting the PUC to protect consumer interests. Secondly, the organisers were able to link their effort to stop the overlay with the objectives of separate but interrelated games, such as a struggle within the PUC over how to respond to the demands of the telephone companies.

A Web-orchestrated campaign was able to accomplish this by employing all channels of communication, rather than simply the Web, hence, it was a Web-orchestrated campaign. The Web also reshaped access to information and people, changing the networks of communication, which proved instrumental to linking players across these formerly separate games of play. lt was also fast, enabling the campaign to mobilise voters in time to support legislative actions, that may have been unsuccessful without a demonstration of public support. Finally, the telephone companies chose not to organise any group opposition to the overlay campaign, perhaps choosing to fight another day.

Notes

1. A concise overview of the literature on electronic democracy is provided by Dutton (1999): 173–93. Kenneth Laudon's (1977) early work is a particularly valuable treatment of the utopian and dystopian perspectives on computers in the political process.
2. Excerpts from the *New York Times* and *Los Angeles Times* coverage of his case can be found on http://www.onedemocracy.com/wenholee. Also, see an investigative, journalistic report of the case within the context of Los Alamos and Livermore labs (Drogin, 2000).
3. This fax is described by Bob Scheer (2000) in his column on 19 March 2000, and recounted in our interviews with both Bob Scheer and Steven Teitelbaum.

4.   The full rationale for focusing on the role of ICTs in shaping access is developed and illustrated in Dutton (1999).
5.   Norton Long (1958) developed the notion of an ecology of games as a critique of the debate over power structures in local governance. Dutton (1992) and his colleagues have adapted the same framework to examine the dynamics of the policy process in communication.

References

Bimber, B. (1998). The Internet and political mobilisation: Research note on the 1996 election season. *Social Science Computer Review*, 16(4), 391–401.

Cason, T.. & Khan, F. (1999). A laboratory study of voluntary public goods provision with imperfect monitoring and communication. *Journal of Development Economics*, 58, 533–552.

Crozier, M., & Friedberg, E. (1980). *Actors and Systems: The Politics of Collective Action* (A. Goldharnmer, trans.). Chicago: University of Chicago Press.

Douglas. E. (2000). Phone Firms Pushing FCC to Add Area Codes in State. *The Los Angeles Times*, 3 June.

Douglas, F., & Shiver, J. (2000), New Rules May Slow the Boom in Area Codes. *The Los Angeles Times*, 17 March.

Drogin, B. (2000), A Climate of Despair Nears Critical Mass at U.S. Labs. *The Los Angeles Times*, 30 June.

Dutton. W. H. (1992). The ecology of games shaping telecommunications policy. *Communication Theory*, 2(4), 303–328.

Dutton. W. H. (1999). *Society on the Line: Information Politics in the Digital Age*. Oxford and New York: Oxford University Press.

FCC. (1999), Federal Communications Commission. California Public Utilities Commission petition for delegation of additional authority pertaining to area code relief and NXX code conservation measures (Order FCC 99–248). Washington. D.C.: Federal Communications Commission.

Gates, B. (2000). Chairman and Chief Software Architect. Microsoft, Letter to Shareholders, 4 April. Redmond, WA: Microsoft.

Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*. 78(6), 1360–1380.

Healy, M. (1999), Trial of the President. *The Los Angeles Times*, Jan. 13.

Krackardt, D. (1992). The strength of strong ties: The importance of philos in organisations. In N. Nohira & R. G. Eccles (eds.). *Networks and Organisations: Structure, Form and Action*. Boston, MA.: Harvard Business School Press.

Laudon, K. C. (1977). *Communications Technology and Democratic Participation*. New York: Praeger.

Long, N. E. (1958). The local community as an ecology of games. *American Journal of Sociology*, 64, 251–261.

Macy. M., & Flache, A. (1995). Beyond rationality in models of choice. *Annual Review of Sociology*, 21, 73–91.

Macy. M. W. (1991). Chains of cooperation: Threshold effects in collective action. *American Sociological Review*. 56(730–747).

McPherson, J.. & Smith-Lovin, L. (1987). Homophily in voluntary organisations: Status distance and the composition of face-to-face groups. *American Sociological Review*, 52(3), 370–379.

Oliver, P. (1993). Formal models of collective action. *Annual Review of Sociology*, 19, 271–300.

Pacific Bell. (1998). Pacific Bell Directory. Los Angeles (San Francisco, CA: Pacific Bell).

PUC (1999). California Public Utilities Commission Consumer Advisory. San Francisco: California Public Utilities Commission. Telecommunications Division. April 12.

PUC (2000). California Public Utilities Commission Report on the 310 Area Code. San Francisco: California Public Utilities Commission, Telecommunications Division, March 16.

Rosenstone, S. J., & Hansen, M. (1993). *Mobilisation, Participation, and Democracy in America*. New York: Macmillan.

Scheer. R. (1999a). Readers Give a Lesson in Communications. *The Los Angeles Times*, Our Times, Santa Monica *(25* April).

Scheer, R. (1999b). Interview on KCRW, Los Angeles, October 20.

Scheer. R. (2000). Only Shortage We Ever Had Was One of Truth. *The Los Angeles Times; Our Times*. Santa Monica (19 March).

Tsagarousianou, R.. Tambini, D.. & Bryan, C. (1998) (eds.). *Cyberdemocracy: Technology, Cities and Civic Networks*. New York: Routledge.

Wittig, M. A. (1996). Electronic grassroots organizing. *Journal of Social Issues*, 52(1), 53–69.

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