Chapter 10

Does the Difference Compute? Data-Driven Campaigning in Canada

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Theoretical Framework

Will data win the next election? The Liberals certainly think their data and digital infrastructure helped their last win in 2015. Minister Navdeep Bain, Innovation, Science and Economic Development, remarked on CBC's The House: "If you take a step back when Mr. Trudeau decided to run for the Liberal party, he really understood the importance of renewing the party and really investing in the party machinery... so collecting data, building up the database, building up a ground game" (Hall 2016). The Liberals continue to invest in data. In 2017, former Liberal digital strategist Tom Pitfield launched Data Sciences Inc., one of Canada's few political data and analytics firms. Liberal party activity is just one example of the growing trend toward data-driven campaigning in Canada.

We define data-driven campaigning as a political logic, following Munroe and Munroe (2016), that considers data a resource to be collected and analyzed in campaign decision making. Data-driven campaigning promises to inject some science into campaigns, but we find its insights as well as its practice subject to constraint and debate in Canada. Our findings show a partial, uneven adoption of this logic. At times, data-

driven practices afford a computational management of political work (Kreiss 2012). This management is partial, limited by institutional constraints, party traditions and technologies. Calling out these limits, however, does not diminish the significance of the data-driven trend in Canada. Our participants' professional sophistication can only be appreciated by attending to how they find and adapt data-driven practices as well as overcome institutional constraints in the hope of reaching more voters and being more organized.

Over the past hundred years of electioneering, political data has moved from clipboards and cardfiles to mobile apps and the cloud. Changing data storage techniques coincided with organizational changes in how parties could coordinate, sort and contact voters. Unfortunately, there is no proper history of political data in Canada. Parties, as they professionalized at the turn of the century, had to better track their membership, likely through card catalogs. Parties began to digitize these records in the 1960s, converting paper into punch card databases. Parties installed computers in their infrastructures to better store data, and they began to rely more on statistics and demographics in campaigning (Pool, Abelson, and Popkin 1965; Chartrand 1972; Nimmo 1970; Kreiss, 2012a; Delacourt 2013). Edwin Black, former President of the Canadian Political Science Association, noted in 1983 that "computers have been used for some time for a variety of political functions: in elections, for polling the electorate, keeping track of mailing lists, recruiting workers, analyzing voting returns, and so on" (Black, p. 676). By the turn of the century, federal parties used electronic databases to track their voters. To many observers, the Progressive Conservative Party have had a competitive advantage due to their integration of electronic record-keeping early on (Flanagan, 2003).

Today all federal parties maintain a central database for voter records. These databases – or what we call political engagement platforms -- expand the political machine. All Canadian political parties have sophisticated political infrastructures connecting central offices to local ridings (Munroe and Munroe 2016). Party databases and communication infrastructure now directly reach voters. Virtual phone-banks – popularized by the 2008 Obama campaign – exemplify a stabilized form of citizen-initiated campaigning (Baldwin-Philippi 2015; Gibson 2015). Citizen-initiated campaigns increasingly rely on emerging political engagement platforms that integrate data collection, analysis and feedback into one unified system (Anderson and Kreiss 2013; C. Bennett 2015).

Canadian parties looked to the private sector for inspiration. The advent of market research likely changed party record keeping as political communication shifted from talking to their voters to listening to them (Marland 2016: 28-30). Advertising and marketing has had the most tangible influence on data-driven campaigning, part of the important role of political marketing in Canada's history (Delacourt, 2013). By the early 1960s, parties depended on data derived from market research and advertising. Martin Goldfarb, for instance, advised Prime Minister Pierre Elliot Trudeau about his image with the Canadian electorate through computer-assisted polling analysis as far back as 1970. Already popular in advertising, computer-assisted direct mail also found its way into party communications. Commenting on the 1972 campaign, Khayyam Z. Paltiel noted that: "one thing is clear, however; the print media such as newspapers are in decline as an election campaign tool, while broadcasting and such devices as computerized 'personal' direct mail are growing in favour" (1974 348). Direct mail merged third-party data, like

magazine subscriber lists, with voter data to begin to "micro-target" voters. Marland describes micro-targeting as "a strategic use of resources, uncovered through market intelligence, designed to focus communications on small segments of the electorate whose profiles indicate a propensity to support the sponsor" (2016 410). Data, as a strategic resource, helped parties profile and calculate voter propensity. Growing computational capacity improved market segmentation for micro-targeting. Canadians eventually followed advances in market segmentation in the United States as well. For example, the Prizm System developed by the Claritas Corporation used cluster analysis to identify 62 market segments in the United States with names like Beltway Boomers and Suburban Pioneers (Johnson 2016 198-199). American campaigns relied on these granular segments in their campaigning beginning in the early 1980s. Around the same time, Martin Goldfarb launched a comparable system known as the Goldfarb report that identified six groups of Canadian voters like day-to-day watchers and aggressive.

Data-driven campaigning has undergone its most recent iteration thanks to the use of the Internet and social media as sources of 'big data' in politics. The first phase of data-driven campaigning (late 1990s to mid-2000s) involved a cautious entry onto the Internet by established political parties. Debate surrounded these early days over whether the Internet was a net positive (Poster 2001), problematic (Margolis and Resnick 2000) or marginal (Bimber 1998). Most parties ran websites primarily for one-way, informational purposes (Stromer-Galley 2014; Foot and Schneider 2006). Such reluctance continued even as the Internet became a bigger part of Canadians' everyday lives. Aside from the ill-fated NDP Orange Room, Canadian parties preferred to use the Internet mostly as a tool for attack websites or as one-way channels of information dissemination in this

second phase (Small 2012). However, as voters shared more online, parties found better ways to harvest and connect that data to electoral records. Digital campaigning then has become data-driven campaigning or, rather, data acquisition as parties engaged in social media learn more about their followers.

Finally, data-driven campaigning is marked by a growing professionalization and the rise of political consultants. Many of the consultancy firms formed after the 2012 Obama campaign, like NGP VAN, Blue State Digital and 270 Strategies, actively work in Canada (Kreiss 2016; Kreiss and Jasinski 2016). The same might be said for MoveOn.org as its tactics have become incorporated into a global community of practice (Karpf 2013; 2015). New digital advocacy groups like OpenMedia, Shit Harper Did and Leadnow shared tactics and resources. Formerly upstart conferences like Personal Democracy Forum and NetRoots Nation matured into institutions, and the rise of new conferences like CampaignTech, organized by magazine *Campaigns and Elections*, are part of a whole global industry of digital and data consultancy in politics.

Case Study

Our research contributes to an emerging research agenda examining data-driven campaigning in Canada (Munroe and Munroe 2016). What technologies are behind it? What motivates parties and practitioners to be data-driven? And, if they are embracing data, how does this alter the current permanent campaign in Canada?

Methods

To answer these questions, we relied on methods of qualitative political communication (Karpf, Kreiss, Nielsen, and Powers 2015). We triangulated interviews with data-driven campaigning practitioners with digital methods in order to study the state of the field in Canada. We surveyed the digital presence of national and provincial parties in Canada and recorded the technologies they used for their websites, email marketing and political databases. Building on platform studies methods developed at the Infoscape Center for the Study of Social Media (Elmer, Langlois, and McKelvey 2012), we examined website code and other tags to identify specific political technologies used by parties. We also used the website BuiltWith.com, a tool that analyzes web code to generate a report about its software. For example, we were able to designate a party as a user of the email tool MailChimp if it used a sign-up form linked to a known MailChimp domain such as list-manage.com. We also contacted each party directly to see if they would be willing to disclose which technologies they use. When unclear, we left a question mark. Our review resulted in the first-ever index of political technology used by federal and provincial parties in Canada (included in the appendix). While we know that parties have changed their technologies, the changes have not been dramatic as indicated in Table 2 of the Appendix. Aside from the NDP switching to a new proprietary database, technologies have largely been stable at the federal level or moved to well-known providers such as NationBuilder, Blue State Digital (BSD) or NGP VAN.

Simultaneously, we interviewed data-driven campaigning practitioners in Canada. We collected a list of consultants who use data-driven technologies and surveyed press coverage to develop an initial basket of names. Over the course of 2013 and 2014, we identified and contacted 41 potential interviewees who worked mostly in large

municipalities, provincial politics or federal ridings. Like many studies of the backrooms of politics (Nielsen, 2012; McLean, 2012; Marland, 2016; Munroe and Munroe 2016), we had difficulty securing interviewees. When we received a reply to our initial request, we often had trouble convincing busy practitioners to spend an hour of their time talking to us. Getting access, according to Nielsen, is a crucial task, but "campaign staffers' fear of spies and double-dealers illustrates why it is not always a simple one" (2012, 194). In the end, we successfully completed 17 interviews, listed in Table 1. Each interview followed a semi-structured format. Questions sought, in general, to understand the particular work of the interviewee as well as their overall impressions of data-driven campaigning in Canada. We also tried to have a sense of the specific technology used by the interviewee when developing questions in part to ask what features are not used. Many of those interviewed have gone on to be leading voices in their parties, running leadership campaigns and otherwise advancing the craft of data-driven campaigning in Canada.

Findings

Data-driven campaigning, to many of our interviewees, addressed a political desire to use science rather than instinct. This feeling is a sign that data-driven campaigning is guided by a political logic to professionalize. Participants often cited American success stories as sources of inspiration, from the George W. Bush campaign's micro-targeting to the various innovations of the Obama campaign. Hamish Marshall, former campaign manager to Andrew Scheer and then of political consulting firm Go New Clear Productions, explained, "the sort of overarching thing connecting all my time in politics is: let's try to inject a little bit of math and to see how that works" (Marshall, personal communication, 21 March 2014). The results might only be incrementally better than nothing as Mike Martins, Director of the School of Practical Politics at Manning Centre for Building Democracy, explained:

> What we know is that the average campaign doesn't have enough responses to do even testing. So it's anecdotal but it's better than gut instinct. Let's test those gut instincts to a certain level. It's not scientifically or statistically accurate, but it's better than nothing. I would say that phrase 'let's just improve things just a little bit' is the key psychology in adapting new technologies (personal communication, 2014).

This quote is a good reminder, amidst the constant worry over the next disruptive technology be it artificial intelligence or psycho-demographics, that politics is human

after all. Campaigns are often patched together, an ad hoc combination of experimental tools and people that breaks down soon after election day (cf. Kreiss, 2016).

Injecting science often involved improved forms of data collection and analysis, better user of email and other forms of voter contact as well as improved micro-targeting. Data provided a slim but often crucial advantage in today's narrow electoral wins. As Emma Gilchrist, Writer/Editor of DeSmogBlog, Engagement Consultant, and former Communications Director at Dogwood, explained:

> elections are won in just a handful of ridings and beyond that really just a handful of polling divisions within those ridings… [so] there is definitely acknowledgement that if you want to get politicians' attention you probably want to have a presence in those swing ridings. (5 March 2014).

Interviewees suggested that data allowed campaigners to strategically choose where to spend time and resources. This information often had to be more granular and focused on micro-targeting. Mitch Wexler, principal of Politrain Consulting, developed a political technology called Track and Field, which he explains:

> helps focus people on that information so they understand where things stand across the riding, or across the jurisdiction of the campaign; then [ask] where do they need to focus, how do they access the particular information that they need? (Wexler, personal communication, 26 March 2014).

Data-driven campaigning is again a way for campaigns to better manage their limited resources, avoiding voters they are unlikely to persuade and targeting the few voters needed to be first past the post.

Email campaigning offers a good example of the relationship among databases, email and websites. A successful campaign requires a list of voters along with their email addresses to send campaign messages, drive fundraising and recruit volunteers. List building occurs through online campaigning, particularly websites that encourage users to sign up for a party's mailing list. Often these sites disguise themselves, inviting users to register their email account to send e-cards or sympathy notes while also sending data to the campaign. Once in the system, voters can be segmented and targeted with different messages. Campaigns write email messages, varying the subject line, author and content to hopefully elicit the voter to visit the website or donate. Email messaging requires good copy and constant testing. Campaigns A/B test messages where they send two different messages to a sample of their list. Standard analytics tools embedded in the email help determine the best performing message. The winning email might then be sent to the rest of the voter list. Alternatively, emails might be more targeted as campaigns try to guide voters into participating more in the campaign—what our interviewees called a pyramid of engagement or growth hacking.

Email is just one application of data-driven campaigning. We encountered a strong diversity of tools at use in Canada in our review of provincial and federal party digital infrastructure. What's striking is the mixture of technologies. Parties appropriated commercial marking tools, adapted open-source products and developed their own custom software. In contrast to the partisan infrastructures developed by the Republicans and Democrats in the United States, Canadian political parties often used the same, off-the-shelf technologies (with the exception of political databases). As seen in the tables in the Appendix, the New Democratic Party and the Conservative Party both have custom

database systems,[i] whereas the federal Liberals ran the Democrats' NGP VAN to power its *Liberalist* system. However, the Manitoba NDP are a notable exception as they used the same NGP VAN as the federal Liberals. Provincial parties show even more diversity as seen in Table 3 of the Appendix. All parties preferred open-source, general-purpose software like Drupal and WordPress to run their websites. Choice of mailers varied even more. Only MailChimp, a commercial email marketing tool, had repeated adoption.

Each of these technologies brings along certain repertoires of data-driven campaigning. Micro-targeting is a key logic operating across campaigns. Websites, databases and email services collect data passively by logging website traffic or open rates as well as actively encouraging voters to share the data. All this data helps sort and target voters through data analytics. Many off-the-shelf technologies provide what Baldwin-Philippi (2016) describes as pre-made analytics that provide campaigns with platform-specific metrics to evaluate voter interactions. Campaigns often use third-party tools, such as Google Analytics, as another source of feedback from voters in addition to their own analytics systems. While we didn't gain access to party databases, the Conservative Party databased called CIMS provides a good example of this computational management. Leaked screenshots of the database suggest that CIMS allowed the campaign to rate voters from Non-supporter (-15) to Supporter (15). The Liberal Party of Canada, according to reports from the 2015 election, had a central analytics team to help local campaigns rank voters on their likelihood to vote and, secondarily, to vote Liberal. These analytics also assist campaign workers in deciding where to allocate canvassers, what literature to drop and how often to contact the voters (Munroe and Munroe, 2016; Patten 2016).

Money, party and political logics influence the adoption of these political technologies and their corresponding repertoires of data-driven campaigning. The popularity of ready-made technologies comes down to money. Interviewees explained their choice of technologies had a lot to do with Canadian politics having less money (compared to the US). A lack of funds inhibits the development of systems internally and motivates the decision to select a commercially available product. These factors also limit importing expensive political technology from the US or hiring developers to develop it internally. As we discuss elsewhere (McKelvey and Piebiak, 2016), data-driven campaigning is ported to Canada, a process of hybridization where often American developers work with consultants and parties to adapt the tool to the local context.

The lack of funding concentrates data-driven campaigning into parties' central offices, though local campaigns have been sites of technological innovation. Tasked with being a hub, parties have invested in technologies that ease central management. Unlike so much of the press coverage about digital politics in Canada, campaigns often look outside the United States for these solutions. As Marshall explained:

The idea of centralized literature is foreign [to someone in Washington]. . . . Whereas in the UK . . . they came up with a system, an online system, where instead of having graphic designers customizing all these pieces of literature a local campaign could log in, basically upload the pictures that they want, and drop them on standardized literature— with one click of a button add their address, phone number and website and output printer-ready art. That's something we have tried to do and now have very successfully implemented for various clients in Canada (Marshall 2014).

Data-driven campaigning thus involves tools to help parties centrally coordinate their different local ridings. Local ridings also can be the source of innovation and change. Interviewees working in local ridings did discuss the need to adopt the technology used by the central party, but a few campaigns, notably Ontario Liberal Leader Kathleen Wynne, broke from party infrastructure to use their own data-driven applications. These innovations were either merged back into the central party or discarded.

Overall, data-driven campaigning involves a greater attention to the flows of data, expertise and technology in hierarchical parties. The diverse list of tools in the appendix illustrate one of the many complications in making data flow. While these technologies separately collect data, they do not necessarily share data. Interviewees often discussed the challenge of integrating data collected from separate technologies. WordPress, for instance, includes a plugin to easily add NGP VAN forms to websites. Drupal, the other popular website management tool, does not. Interviewees expressed that getting technologies to inter-connect is often difficult and complex work. Better data integration is part of the reason we see growing adoption of integrated political engagement platforms like NationBuilder in Canada.

As much as it might be attractive to share data and use similar technology, we do not observe a correlation between federal and provincial technology adoption. Past research has shown the NDP as the most integrated party, followed by the Liberal Party and the Conservative Party (Pruysers 2016). A similar pattern would have shown provincial NDP parties using the same technologies as their federal counterparts, less so for the Liberals and Conservatives. Instead, adoption varied greatly. Some provincial parties did adopt technologies used by their federal counterparts, but never a majority as

seen in Table 2 of the Appendix. More often, a provincial party adopted a different technology. We do not have enough data to make any conclusions about database usage. In our interviews, we saw influence go both ways. The Ontario Conservative Party originally developed CIMS; its federal counterpart later adopted and extended it. The Federal Liberal Party, conversely, has led provincial parties to adopt NGP VAN. This suggests that data-driven campaigning was uneven across the same party even though partisanship guided the circulation of data-driven technologies and practices.

#Trending in Canada

Data-driven campaigning is part of the trend toward permanent campaigning (Elmer, Langlois, and McKelvey 2012; Esselment, 2014; Giasson, Marland, and Small 2014). The logic of permanent campaign has led parties to centralize, professionalize and invest in a "formalized election apparatuses (or in the vernacular, party 'machines')" (Elmer, Langlois and McKelvey 2012, 2). As much as these machines might break down and be impermanent (Kriess, 2016), the permanent campaign frames these gaps as failures and add a logic that parties *should* always be active, always collecting better data. Parties have to work constantly to update their databases in order to understand a fragmented and disinterested electorate as well find new political supporters. Once in the system, parties have to keep voters engaged and contributing feedback in order to make decisions based on data not gut instinct.

Data-driven campaigning, based on our findings, has three overarching logics orientating political activity. It involves: (1) data collection connected to (2) systems of

feedback and communication that (3) facilitate greater computational analysis and decision making. In practical terms, these trends have led to:

1. *Political parties and candidates developing, populating and distributing databases*

These systems of data management have been developed by political parties and consultants to store, correlate and mobilize their data resources. Parties populate their databases using Elections Canada data and other public records (cf. Hersh 2015), logs generated from better tracking their own activities, paying political data brokers (Bennett 2013; Kreiss and Howard 2010; Kreiss 2012a), as well as an infusion of data from Internet advertising and social media profiling (cf. Turow 2012). This information pools into databases maintained by local ridings as well as provincial and federal parties.

2. *Political parties and candidates adapting and building systems of communication and feedback between voters and political campaigns*

Feedback varies from media to media, from metrics of voter support collected through door knocking to open rates in email messaging. Forms of feedback might be divided between active and passive. Active feedback includes surveys, polls and donations – overt signals of political support. In addition to these active systems of feedback, websites and email open rates function as what Karpf (2012) described as passive democratic feedback. A voter sends considerable passive data when they open a website or an email.

3. *Political parties and candidates appropriating and developing analytical techniques such as cross-tabulation, clustering, performance indexes, email open rates and predictive analytics*

These developed to identify voter affinities, interpret internal polling results, gauge message effectiveness and predict voter behaviour (Howard 2006; Malchow 2008). Data-driven campaigns, when working, seemed to provide campaigns with a computational management. Kreiss defined the concept as "the delegation of managerial, allocative, messaging, and design decisions to the analysis of users' actions made visible in the form of data as they interacted with campaign media" (2012, 144). Where he used the term to describe how the 2008 Obama presidential campaign used data to justify campaign spending, we observed passive feedback helping campaigns make better decisions about messaging as well as voter data helping campaigns identify priority areas.

Research on the trend toward data-driven campaigns frequently focuses on how these practices change voter privacy as well as the democratic function of elections. Following allegations that automated calling had been used to suppress voting in the 2011 Canadian Federal election, the Office of the Privacy Commissioner of Canada published a report on the privacy practices of major political parties (Bennett and Bayley 2012). The report raised concerns over the lack of regulation over the parties' data collection practices, which are subject to neither the Privacy Act nor the Personal Information Protection and Electronic Documents Act. It echoed concerns about 'dataveillance' in the academic (Bennett 2013; Kreiss and Howard 2010; Tufekci 2014) and popular literature (King 2015; McGregor 2014). The Privacy Commissioner of Canada has recently called

for new regulations for political parties (Therrien 2016). Data-driven campaigning has also prompted questions about the partisan use of political communication in a democracy. Parties ideally use political communication to inform citizens about candidates' positions on important issues in order to help voters make knowledgeable decisions on Election Day. The literature debates whether computers have helped create new forms of engagement for voters (Baldwin-Philippi 2015; Karpf 2012; Shirky 2008) or led to a managed citizenship where campaigns' self-interest undermines the public interest (Howard 2006; Kozolanka 2014).

Electoral privacy regulation does constrain data-driven campaigning. Compared to the United States, donation and voter data restrictions diminish the effectiveness of data-driven campaigning, as interviewees explained. Most political software requires voter information to populate their databases, but data are harder to find in Canada than in the United States. There, VoterListsOnline sells data from $0.03 to $0.12 per record and NationBuilder offers a free voter file to campaigns. The same data are not as accessible in Canada. The Canada Elections Act only allows registered political parties to access the voter list. Section 111 prohibits the use of "personal information that is recorded in a list of electors for a purpose other than (i) to enable registered parties, members or candidates to communicate with electors." This electoral law largely prohibits a third party from accessing voter data in Canada while simultaneously empowering central political parties. Other demographic information is for sale in Canada, but interviewees mentioned its prohibitive cost. Donation limits also diminish the return on investment for finding the right voters even in provincial elections with higher limits. A list of voter data might simply be too costly to justify the expense.

While regulation reduces the appeal of costly data-driven campaigning, it favours incumbents and campaigns invested in perpetual data collection. This raises a different set of questions than the privacy debate related to inequitable access. New campaigns do not receive voter data until the start of the official campaign, a minimum of 36 days, and political consultants consider the release to be too late. Elected officials often begin the campaign long before the actual start date—an example of permanent campaigning. As Stuart expressed, "we might only be three weeks out that you might actually have the list of all the eligible voters which is totally, totally crazy (Stuart, personal communication, 11 December 2014). This delayed access favours incumbent campaigns who retain a copy of the voter list from past campaigns or from the central party. As Mike Martins explained:

> Now the average campaign in Canada, I would say, is getting their data from previous campaigns. The legitimacy of that is highly questionable; just that nobody questions it, nobody challenges it, there are lists just floating around (personal communication, 5 March 2014).

The shelf life of data encourages more party centralization. It is in every party's interest to keep their data and to develop a party machine to maintain it. Faced with this data disadvantage, new candidates and party outsiders face pressure to enter the permanent campaign as soon as possible. They can either start building their own list as soon as possible or else risk falling further behind in data collection. Such inequity adds another reason to review the privacy laws associated with political data in Canada.

The importance of the electoral list is just one example of the ways the state acts as a political information subsidy to parties (Hersh, 2015). In the United States, much of

what counts as data-driven campaigning ends up being aggregation of public data, according to Eitan Hersh. Not only do parties depend on public data, but simple data, like voting history, is often more useful and predictive than much of the complex demographic data sold by third parties in the United States. While we never heard "the secret sauce" used in predictive analytics or micro-targeting (beyond swing ridings), access to information requests to Elections Canada demonstrate clear demand for public records about campaign donations. For example, in 2015 someone requested:

> A data extract (e.g. Excel, csv, Access) of the Contributor's Database that contains the following columns: Client ID, name of contributor, political party, contribution given to, date received, fiscal year, financial report, class of contributor, monetary and non-monetary for the years 2008 to the present.

Elections Canada disclosed 40,598 records to that one requestor. Perhaps the real secret of data driven campaigning is knowing how to ask for available data and less about complex predictive analytics.

Practitioners shared their struggles for data-driven campaigning to be accepted in everyday politics. Digital strategy, as discussed by our interviewees, is often provided with fewer resources than other parts of the campaign, though this is changing. However, political consultants not only have to sell the idea that these tools can make a difference and are a good investment, they also have to confront older approaches and styles of political organizing. Emma Gilchrist, a political organizer, recounts that in environmental movements in Canada,

> I don't actually think that the cost of those solutions is the main barrier to curb pursuing. It's more of a culture problem, and there needs to be a serious shift in the

way things work. And even when groups do pursue them they don't necessarily use them to their full potential, because you know they have a lot of baggage in terms of the way things used to be done (Gilchrist, personal communication, 5 March 2014).

Other interviewees suggested that there has not been a change in political culture since these technologies have been introduced. Instead, gut reaction or opinion still seem to bear more importance, because people:

especially moderately successful people in politics, have opinions based on their experience, and if they are not numbers people—and most people in politics by nature are not numbers people, they are people people—they are less likely to listen (Marshall, personal communication, 21 March 2014).

Even as campaigns begin to acknowledge that investing in this area is "something that is important and they are willing to spend some money on it, but whether or not that actually affects their opinions or their action is another story entirely" (H. Marshall, personal communication, 21 March 2014). Mitch Wexler echoes this sentiment in terms of on-the-ground campaigning: that when it comes down to it "some people still use good ol' Excel, and you know God bless them. They have a tough time but they have been doing it for so many years and as long as they can make it work and volunteers are happy then, that's all that matters right?" (personal communication, 26 March 2014). Reservations about new styles of campaigning, especially the emphasis on data afforded by political software, illustrate the influence of the permanent campaign. They evaluated technologies in relation to winning campaigns. Though interviewees cited a desire to use

new technologies to better inform voter as part of a properly functioning democracy, they ultimately sought the best tools to win on Election Day.

The final question about data-driven campaigning concerns its impact on democracy. Political data has long concerned scholars and politicians. Edwin R. Black in his 1983 Presidential address to the Canadian Political Science Association hoped that "computer simulations and model-testing could, theoretically, lead to innovative policies." (688). However, he worried that what now would be called data-driven campaigning would be put to political ends. "The spread of electronic data-processing could well lead to a takeover of much of our public policy apparatus," Black continues, "It probably will not be the computer specialists themselves who move in. The winners will be those prepared to learn what [electronic data processing] in government is all about and who then go on to bend its promise to achieve their own power goals" (1983 688). It is clear from our interviews that data has a competitive advantage, something to use for political gain not advancing democracy. Without regulatory changes, we suspect Black's concerns will be valid for years to come.

Appendix 1: Key Figures and Findings

Table 1. List of Interviewees (Names Disclosed with Consent)

Number	Interviewee
1	Anonymous, December, 12 2013
2	Anonymous, March 28, 2014
3	Anonymous, Olivia Chow for Mayor Campaign, March 20, 2015
4	Anonymous, Groundforce Digital, August, 14 2014
5	Anonymous, NationBuilder, July 7, 2014
6	Brett Chang, Cofounder and Partner, Adrenaline, July 17, 2014
7	Ethan Clarke, Cofounder, Campaign Gears, March 14, 2014
8	Joe Federer, Founder, Campaign Central, February 21, 2014
9	Emma Gilchrist, Writer/Editor DeSmogBlog, Engagement Consultant and Former Communications Director at Dogwood, March 5, 2014
10	Hamish Marshall, Chief Research Officer at Abingdon Research; President and COO at Go New Clear Productions, March 21, 2014
11	Mike Martins, Director of the School of Practical Politics at Manning Centre for Building Democracy, March 5, 2014
12	Graham Mitchell, Director of Training and Leadership, Broadbent Institute, July 18, 2014
13	Brad Oldham, Project Manager, Popular Change, June 18, 2014
14	Geoff Sharpe, Manager, Digital at the Office of the Premier of Ontario, July 17, 2014
15	Josh Stuart, President, cStreet Campaigns, December 11, 2013
16	Dan Walmsley, Chief Technology Officer, NationBuilder, March 7, 2014
17	Mitch Wexler, Principal, Politrain Consultants, March 26, 2014

Table 2. Political Technology Use by Federal Parties in 2014 and 2017

Party	Database		Website		Mass Mailer	
	2014	2017	2014	2017	2014	2017
Greens	?	?	Drupal	Drupal	CiviCRM	CiviCRM
Liberals	NGP VAN	NGP VAN	WordPress	Wordpress	NGP VAN	BSD
New Democratic Party	NDPVote	Populus	Drupal	BSD	CiviCRM	BSD
Conservative	CIMS	CIMS	WordPress	WordPress	MailChimp	MailChimp
Bloc Québécois	?	?	?	WordPress	?	?

Table 3. Political Technology Use by Provincial Parties in 2014

Province	Party	Database	Website	Mass Mailer
Alberta	Liberals	?	NationBuilder	?
Alberta	New Democratic Party	NDPVote	Expression Engine	Constant Contact
Alberta	Progressive Conservatives	?	Dreamweaver	VerticalResponse
Alberta	WildRose	?	WordPress	?
British Columbia	Conservative	?	WordPress	?
British Columbia	Greens	NationBuilder	NationBuilder	NationBuilder
British Columbia	Liberals	?	n/a	?
British Columbia	New Democratic Party	?	Drupal	?
Manitoba	Conservative	?	Dreamweaver	?
Manitoba	Liberals	?	WordPress	?
Manitoba	New Democratic Party	NGP VAN	Drupal	?
New Brunswick	Conservative	?	WordPress	?
New Brunswick	Liberals	?	WordPress	?

New Brunswick	New Democratic Party	<u>SUMAC</u>	Drupal	MailChimp
Newfoundland and Labrador	Liberals	NGP VAN	WordPress	MailChimp
Newfoundland and Labrador	New Democratic Party	?	WordPress	?
Nova Scotia	Conservative	?	WordPress	?
Nova Scotia	Liberals	NGP VAN	Event Espresso	NGP VAN
Nova Scotia	New Democratic Party	NDP Vote	WordPress	Drupal
Ontario	Conservative	?	Expression Engine	?
Ontario	Liberals	Aristotle	?	Campaigner
Ontario	New Democratic Party	?	WordPress	MailChimp
Prince Edward Island	Conservative	?	Yoast WordPress	?
Prince Edward Island	Liberals	?	CMS Made Simple	?
Prince Edward Island	New Democratic Party	?	WordPress	?
Québec	Coalition Avenir Québec	Democratik	WordPress	CakeMail
Québec	Liberals	?	CakePHP Framework	CakeMail
Québec	Parti Québécois	?	?	?
Québec	Québec Solidaire	?	WordPress	?
Saskatchewan	Conservative	?	?	?
Saskatchewan	Liberals	?	Drupal	iContact, Vocus
Saskatchewan	New Democratic Party	?	NationBuilder	NationBuilder
Saskatchewan	Saskatchewan Party	?	?	?
Newfoundland and Labrador	Conservative	?	WordPress	MailChimp

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