The Predictable Campaign: Theory and Evidence

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Most of what we know about electoral campaigns originates in the United States. And what we know emphasizes the predictability of outcomes and the role of campaigns in producing that predictability. This forecasting success reflects the operation of what are styled as "fundamentals," factors that campaigns activate in roughly similar ways election after election. Although some analysts suggest that that the US pattern travels abroad, the evidence is fragmentary and never rests on quite the same basis as the US original. To the extent that US findings reflect the operation of universals, notably in voter cognition, they should be replicated elsewhere. But critical to US analyses —sometimes considered explicitly but often merely assumed—are institutional conditions: timing, money, the internal organization of parties, competition between the parties, and the sheer scale of the US economy. But then, documentation of the US case itself is rather fragmentary. We might also ask, then, how well does the stylization fit the original case?

Even for the US, the idea of a predictable election turns out to be quite complicated. More than one macro-pattern is invoked. Mostly the resultant predictions overlap, but occasionally they diverge. More importantly, the very idea of a "fundamental" is contested, with each competitor accompanied by its own notion of predictability. And close inspection reveals that the US story has several layers. Some of the layers may not travel.

This paper is an early investment in travelogue. It reviews macro- and meso-claims about US campaign dynamics and then places the US case in comparison with Germany and Canada, both multi-party parliamentary systems but with quite different institutional endowments and divergent electoral histories.

Fundamentals and Predictability

The charter statement for current thinking about campaigns is Gelman and King (1993), who argue that movement in polls reflects real, short-run political forces. Over the course of the campaign, however, movements are mutually cancelling, ultimately clearing the field for fundamental factors such as party identification, ideological position, and group membership. The other critical fundamental is a key element in the now-ascendent prediction models: the economy.

As the literature evolved, however, not one generic claim about campaign dynamics emerged but three. The simplest is that the frontrunner's lead shrinks (Campbell 2008; Erikson and Wlezien 2012). A more complicated proposition is that the two-party vote division converges on a target (Holbrook 1996; Sides and Vavreck 2013). The patterns are not necessarily contradictory but the propositions are clearly distinct. The third claim is that as fundamental considerations are incorporated into vote intentions, short-term flux in those intentions is damped. This proposition is also mostly compatible with the other two, but is also conceptually distinct. What is more, the argument presupposes a definition of "fundamentals" that is different from the others.

This puts three issues on the table: the time path to Election Day; models of prediction from fundamentals; and the very definition of fundamentals. For Germany and Canada an additional issue suggests itself. In both countries the party system has seen increasing fragmentation. To the extent that fragmentation has been a trend, do campaigns slow the process down or do they accelerate it?

Time Paths

Conventionally, the frontrunner in the US is whichever candidate is in front on Labour Day, traditionally regarded as the start of the general campaign. But that identification rule is not as simple as it seems. In particular, what puts a candidate in front on that day, and does that factor bear any relationship to the political dynamics of the entire election year?

The practical translation of all this is to focus on the candidate for the incumbent party. By far the greatest volatility in a US election year occurs around the nominating conventions (Erikson and Wlezien 2012, p. 31), as the media focus on one convention at a time and deliver mainly positive news (Johnston et al. 2004, Chapter 4). As the incumbent party holds the second convention it approaches Labour Day with an artificial boost. So even if incumbent is behind, it makes sense to focus on that candidate's share.

Focus on the incumbent also helps the discussion go global. For Canada, the identity of the incumbent is clear, as its Westminster system always delivers single-party governments, if not always with outright majorities. For Germany, the incumbent is deemed to be the governing coalition, not just the party of the Chancellor. A difficulty arises in elections following a Grand Coalition, where the two Chancellor candidates are also cabinet colleagues. The solution proposed for 2009 by Gschwend (2009) is to focus on the Chancellor's own preferred post-election pairing, her own party plus a plausible partner from the same side of the ideological spectrum.

The question that comes out of this discussion is straightforward:

- Question 1: Does the incumbent party or coalition lose ground over the course of the campaign? For Germany and Canada, an additional question seems plausible. Both systems have multiple parties and in each the effective number of parties has increased. To the extent that earlier outcomes represent the basic balance of forces, do campaigns restrain the trend toward multipartism? Conceivably, new parties emerge between elections in response to passing issues or personalities. As the deadline approaches, however, the logic of the electoral system might favour the status quo ante and produce a net defractionalization of vote intentions. Given the strength of the Canadian SMD system, such a defractionalizing sequence might be stronger in Canada than in Germany. Even in Germany the existence of the five-percent threshold for entry into the Bundestag might exert a consolidating effect. The additional question, then, is:
- Question 2: Does the third party share shrink over the course of the campaign?

 In the German case, this includes parties that are available for serving in governing coalitions.

Prediction Models

Far from introducing a random element into politics, competitive campaigns are necessary to make forecasting models work (Gelman and King 1993. The economy is a case in point. Voters respond to the economy and the logic of the campaign almost assures that this recurring consideration will be primed. In good times the economy card will be played by the incumbent and in bad times, by the challenger (Bartels 2006; Claassen 2011). An exception that proves this is rule is the 2000 US Presidential election, when Al Gore turned counterfactual into reality by failing to prime the

economy (Johnston et al. 2004; Bartels 2006). From the US 2000 experience, Vavreck (2009) developed rules for optimal candidate strategies. Postwar elections revealed just enough optimization failure to to substantiate her argument, but not enough to disturb its general application. Empirically, the economy is regularly invoked and when it is, it is a trump.

Expectations for convergence on the target also suits the emphasis on incumbents. Although not all elements in forecasting models refer to the incumbent, the critical moving parts do. They embody a retrospective-voting logic that focuses on some combination of economic performance and incumbent approval (where the latter incorporates some of the effect of the economy). In truth, this has been a field for over-claiming. Although the median prediction from forecasting models routinely predicts the winner, individual models are all over the block, and the median prediction commonly misses the mark, usually by over-predicting the victor's share (Silver 2012). One case where the median prediction nailed the result, 2008, it arguably should not have. One riposte is to insist that the point of the exercise is to locate the forest—the winner—not individual trees (Sides 2012). Given that the forecasters themselves stand by their point predictions, especially when they are correct, this seems a weak rejoinder.

Even so, this section also yields a straightforward question:

• Question 3: Is the share for the incumbent party or coalition pulled toward the forecast result?

What is a "Fundamental"?

For most scholars, the idea is simple: a fundamental is a factor that is inherently fixed for the duration of the campaign. The point extends to the macroeconomy, as economic shifts between elections typically outweigh those within campaigns. This is exactly the conception that animates the preceding section. With these fixed factors in place, we should expect that as the campaign proceeds, the amplitude of swings diminishes (Erikson and Wlezien 2012). Evidence at a "meso" level tends in the same direction. Impact from demographic factors and from issue positions commonly associated with the party system increases (Gelman and King 1993; Andersen et al. 2005; Arceneaux 2006), as does the weight of economic factors (Bartels 2006).

But this is not the only definition of "fundamental" in play. An alternative, process-oriented view is proposed by Erikson and Wlezien (2012, p. 50):

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¹ Although most analysts posit that campaigns yield increases in the absolute values of coefficients on fundamentals, as just described, another image was mentioned in passing in Gelman and King (1993) and rendered more explicit in Kaplan et al. (2012). Here the pattern is "mean reversion," the convergence of coefficients in the current campaign on the pattern prevailing in the long run. Often, this expectation coincides with the first, that is, with increases in coefficients' absolute values. But if some factor carries unsustainably great weight in the early going, its value should diminish. No direct test of the possibility seems to exist in the published literature, but Kaplan et al. (2012) present an indirect test: an out-of-sample prediction model with coefficients derived from earlier elections becomes more powerful as the the campaign advances. This subtlety is not implicated in any of this paper's analyses.

... fundamentals move as a random walk, whereas short-term campaign forces create a stationary series of deviations from the moving fundamentals.

They presume, as do Gelman and King, that many, perhaps most, campaign effects are transitory. At one point there may be a local equilibrium, a pattern that persists. Vote intentions may be moved off this position by a shock, for example, a burst of favourable media coverage. But if the media move on to another story, memories will fade and intentions will revert to the starting point. How quickly they revert is a matter of intrinsic interest, especially if the shock hits near the end of the campaign. But a powerful new argument or a dawning realization may displace the equilibrium itself, such that after the shock the new position will persist; it will not revert to the former starting point. This is the essence of the notion of a random walk. And a random walk can pull a result anywhere: away from the value predicated on stable, pre-campaign factors; toward a wider margin; and so on.

Most of the time, Erikson and Wlezien observe, the accumulation of persistent impacts incorporates factors that qualify as fundamentals by the other definition. They observe, for example, that in a prediction model that also includes current poll information, the direct impact of the economy on choice diminishes with time. This is not because the economy becomes less important, only that its effect is now incorporated into the poll information (p. 124). Similarly, the cumulation of shocks intensifies differences among persons, emptying out the persuadable middle. This includes activation of partisanship (p. 55ff). Forces operating like this make defection from the front runner to the trailer greater than defection in the other direction (p. 53ff). If the incumbent is the front runner, this is a mechanism for the narrowing of the incumbent's lead. Alternatively, it could help bring a trailing incumbent back into the game, and move the result closer to historic values. So far, Erikson and Wlezien seem only to be spinning an elegant variation on the main story.

The key, however, is that the moving equilibrium is itself the product of campaign induction. By themselves, fundamentals as Erikson and Wlezien define them do not guarantee predictable outcomes. Their model accounts for key dynamic features, notably diminishing amplitudes of swing and narrowing of margins, but not for the ultimate landing place. The economy is important in their argument, to be sure. But they also permit less predictable factors to disturb the random walk, with the implication that the result may be pulled away from the predicted one. An example is the fate of Al Gore in 2000. Johnston et al. (2004) show that the collapse of his reputation for honesty, the product of media induction, marks a phase shift in the campaign. The idea of a phase shift cannot be squared with a stationary time series. And a net shift in the perception of a candidate's trait does not fit the standard definition of priming an ordinary "fundamental."

To the extent that unpredictable factors are in play, fundamental considerations defined by temporal invariance are not absolutely determinative. But even if the outcome is not all that predictable, the campaign might still direct the electorate toward the predicted value, just not get voters all the way there. It is with this possibility in mind that I formulated Question 2 in a minimalist directional sense.

The Erickson-Wlezien scheme points to another way that campaigns might frustrate simple fundamentals: their openness to short-term flux, the sort that does *not* move the underlying equilibrium. If it occurs late enough, that is, before voters forget about it or before counterattacks

can be mounted by the disfavoured side, it can redirect the course of history. The 2000 US campaign is again a case in point. By the end, the Gore campaign was short of money and was heavily outspent by the other side. The imbalance was especially marked in Florida, the ultimate "battleground" state (Johnston et al. 2004, Chapter 4). The weight of advertising perfectly exemplifies short-term factors that can disturb an equilibrium without displacing it. Ads engage memory-based cognition and memories fade quickly, such that ad impact has a half-life of mere days (Gerber et al. 2011; Hill et al. 2013). Most such differentials are countered or have their effect fade naturally, such that the narrative disappears from history. Florida was an exception, and for this reason (among others) the 2000 campaign did not merely reveal history, it made it.²

If one part of this story is the speed with which effects decay, the other is the size of the instantaneous—that is, pre-decay—effect. Working against late-campaign impact is the tendency for electorates to become less responsive overall as the deadline approaches. The progressive damping of flux—the decline in the electorate's responsiveness to a disruptive signal of a given strength—is one of the strongest implications of the Erikson-Wlezien model. But how quickly does this hardening of intentions operate?

This brings us back to cross-national comparison. The speed of damping may not be constant across all settings. Jennings and Wlezien (2016) show that parliamentary frameworks, reliant as they are on strong parties, are generally quicker than presidential ones to incorporate fundamental considerations, however those are defined.³ To the extent that the presidential-parliamentary comparison is also a candidate- versus party-centric one, we should also expect incorporation to be quicker in list-based Proportional Representation (PR) systems than in candidate-based single-member district (SMD) systems. So far, these claims rest on a very Olympian comparison: all systems that fit one or the other category for the thousands of polls conducted since the dawn of the industry. The more confined comparison in this paper sacrifices completeness of coverage for a more microscopic examination. The questions are:

- *Question 4:* Do German and Canadian campaigns incorporate fundamentals more quickly and completely than US ones? That they do is implied by Jennings and Wlezien's comparison of presidential and parliamentary systems.
- *Question 5:* Do German campaigns accomplish this incorporation more quickly and completely than Canadian ones? This is implied by the comparison of PR and SMD systems.

The pace and degree of incorporation in survey readings of vote intention is indicated by the volume of day-to-day flux.

² An effect of similar magnitude may have emerged at the end of the 2012 campaign, when Mitt Romney was finally able to outspend Barak Obama. The impact was discernible but not large enough to offset the balance of fundamental forces (Sides and Vavreck, p. 221) and may itself have been offset by a larger and more efficient Obama ground campaign (*Ibid.*).

³ The contrast in question is between presidential arenas and the parliamentary ones. The legislative arena in presidential systems is actually modestly quicker than its parliamentary counterparts to incorporate fundamentals.

Fixed Fundamentals

Data and Methods

The survey data for all analyses in this paper come from academically-based studies that use the "rolling cross section" design (Johnston and Brady 2002). These are the Canadian Election Study (CES), 1988-2011, the German Longitudinal Election Study (GLES), 2005-13,⁴ and the National Annenberg Election Study (NAES), 2000-8. Although this means smaller samples than in the Erikson-Wlezien-Jennings work, there are no "house" effects in these data: these are integral surveys with a single sampling strategy and the same questionnaire. What is more, all are true probability samples with a good track record of anticipating the actual result in the last week of fieldwork. They are subject to no post-stratification weighting and no massaging for "likely voter" identification.⁵ Each day in these data sets is a random draw from time, such that all that distinguishes respondents interviewed on one day from those interviewed on another day is something that has happened in the interval.

As daily samples are small, all representation of campaign dynamics requires smoothing. In this paper, smoothing is by fractional polynomials, which yield confidence intervals as well as daily point estimates. Although representations of the dynamics are quite stylized, they are not misleading about the general direction of shifts nor about the final values in each campaign series.⁶

The fundamentals-driven "target" for each series is specific to the country. For the US the target value is the median prediction in the tournament of models in the issue of *PS: Political Science & Politics* that appears just before Labour Day. Only models that rely solely on information that is truly exogenous is used; models that include current poll information are excluded. In addition to the median forecast the upper- and lower-bound predictions also appear. For Canada there is only one model that covers all of the campaigns examined in this paper (Bélanger and Godbout 2010, 2011). It incorporates factors much like those in the US, a mix of macroeconomics, approval, and longevity in office. Each prediction is out of sample for rotating iterations of the model. For Germany, the field has been dominated by the "Chancellor" model (Norpoth and Gschwend 2009, 2010, 2013). In contrast to the US and Canada, this model does not have an economic component. It includes a moving average of vote shares, longevity in office, and the current popularity of the Chancellor. As in Canada, predictions are out of sample. For both Canada and Germany, I use these models' point predictions, with confidence intervals based on the standard errors of estimate from the most comprehensive statements (Bélanger and Godbout 2010; Norpoth and Gschwend 2009).

⁴ The 2005 study predates GLES the design was incorporated wholesale as its RCS component.

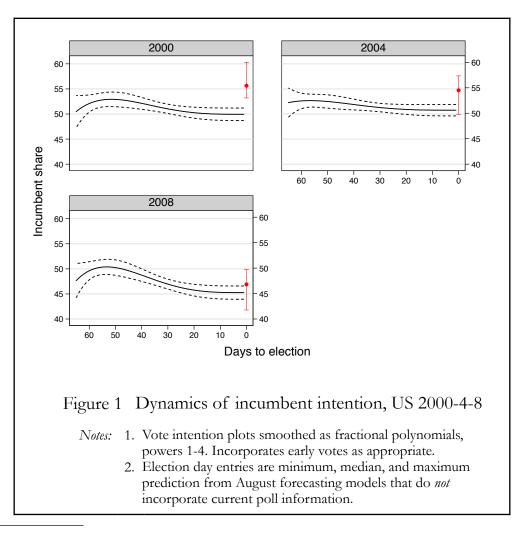
⁵ On the consequences of which see Erickson et al. (2004).

⁶ This is least true of the 2005 German RCS. It tracks trends well but overstated the SPD share.

⁷ German forecasting may be moving toward a tournament of models (see, e.g., Kayser and Leininger 2014).

The US, 2000-8

In the US, one expectation is routinely fulfilled: the incumbent party consistently loses ground. The evidence appears in Figure 1. In 2000, Al Gore, running to succeed Bill Clinton, benefitted from a convention "bump." His immediate post-convention lead was not that great, but the bump brought him from a long way behind (Johnston et al. 2004, p. 27). His lead then grew over early September, whereupon it evaporated. At the end Gore barely won the national popular vote. Roughly the same sequence describes 2004. The Bush campaign emerged from the convention season ahead of John Kerry. In fact, Bush gained the lead before the Republican convention but the bump expanded it. The rest of the campaign eroded the lead and, although Bush's victory was clear, the final margin was narrow. The story was repeated in 2008, with especially dramatic effect. This year merits a bit of elaboration. It seems commonplace to focus on the Democratic share in 2008 and to regard Barak Obama as the frontrunner whose lead, contrary to the norm, expanded. This expansion is attributed to the financial crisis that struck in late September (Campbell 2009; Lewis-Beck and Tien 2009). Indeed, Lewis-Beck and Tien argue that the margin would have been even wider had race



⁸ The rather aggressive smoothing in Figure 1 disguises the fact that Gore was behind for most of the last month.

considerations not blunted the baseline Democratic advantage. It is true that Obama's position over the summer was slightly stronger than that of John McCain and was given a boost by the Democratic convention. But the Republican convention came after the Democratic one and gave McCain a massive bump. The boost was largely attributable to Sarah Palin, as was the subsequent free fall (Johnston and Thorson 2009). The timing of the financial crisis simply does not fit the fine print of the shift (*Ibid.*, Johnston et al. 2010). In fact, most of what happened is parsimoniously explained as the unravelling of a short-term convention bump.

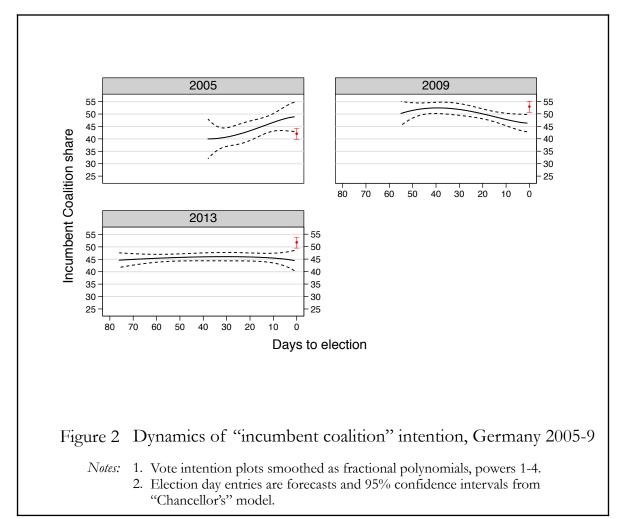
The other expectation does not fare as well: the campaign does not routinely bring the electorate to the long-term forecast, not to the median value at least. In 2000, the only thing that helped voters close in on the forecast was the Democratic convention, such that by mid-September all seemed well for the models. Subsequent dynamics took the electorate away from the result, even from the lower-bound prediction. The same was mostly true in 2004, although the late-campaign reading is just above the lower-bound of all forecasts. The best news seems to be for 2008, when late-campaign readings and the median forecast are quite close. One might ask, however, *why* they are so close given the massive deterioration of economic conditions between the date the forecasts were posted and the end of the campaign. The answer might have been given by Lewis-Beck and Tien (2009) but the careful analysis by Tesler and Sears (2010, Chapter 3) indicates that although the 2008 result was more racialized than earlier elections were, the net effect was essentially a wash. The relative success of forecasting models in that year may have been a happy accident (Campbell 2009).

Germany, 2005-13

In Germany, no consistent incumbent pattern appears, according to Figure 2. In 2005, the incumbent Red-Green share went up. In 2009, the share for the Chancellor's idealized Black-Yellow coalition went down. In 2013, the same coalition (which was also the one that actually governed) exhibited no trend. But then, German elections are unlike Canadian ones in being on an essentially fixed schedule and unlike US ones in lacking dynamic stimuli on the scale of the nominating conventions. There is thus no reason to expect routine inflation of incumbents' early poll position. It is slightly awkward that the one campaign initiated at a time of the incumbent coalition's choosing, in 2005, produced an upward movement.

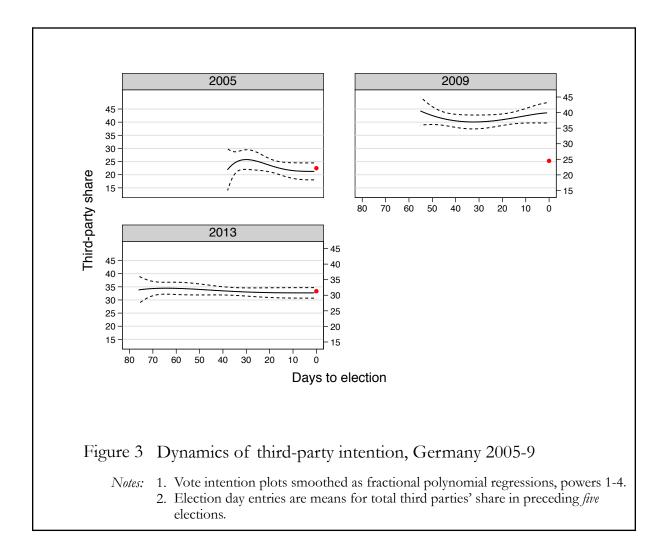
Perhaps this movement reflected the pull of the forecast "equilibrium." The evidence does not seem consistent with this possibility, however. If anything, the forecast result was better realized at the beginning of the campaign than at the end. But then, the forecast for 2005 was actually pretty successful; the problem is with the survey, which ended up over-predicting the Red-Green share. The survey did much better in 2009 and 2013, however, and in neither year did the campaign produce convergence on the forecast share. In 2009, in fact, the opposite happened.

For third parties, German campaigns do nothing, it appears, to conserve past patterns. The advance and retreat of third parties proceeds regardless, and within-campaign dynamics are modest at most. The evidence is in Figure 3. (Again, the 2005 survey seems less satisfactory than the others in its representation of the overall balance of parties. The survey missed the actual third-party total by about ten points.) Movement occurs for individual small parties, but most such movement is difficult



to detect even in commercial polls with large samples. The 2013 campaign was quite intensely polled and basically confirms the pattern here. The only detectable movement that year involves the Greens, and most of that occurred early, one month or more before election day. The day itself was fraught with uncertainty but this was about where parties would fall relative to the five-percent threshold. The threshold kept a new party, Alternative für Deutschland, out of the Bundestag, but it also eliminated a long-standing coalition participant, the FDP. In each case, the uncertainty stemmed from imprecision in polls, not from an obvious survey trend. The much scantier evidence from the earlier campaigns does not reveal much movement. In general, third-party impulses are set in place before the campaign begins and are hardly touched by it. The postwar alignment of parties does appear to be losing its grip, but this is not a campaign phenomenon.

⁹ The claims about polling in these elections are based on the Wikipedia entries for the respective Bundestag elections.

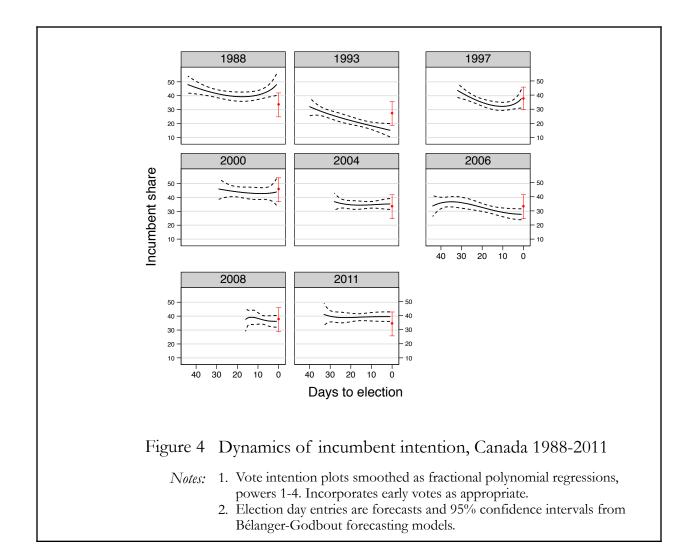


Canada, 1988-2011

The Canadian case is broadly consistent with the US one, according to Figure 4.¹⁰ The party in power never gains over the campaign, and six of eight times it ends up worse off. Sometimes, the loss is only slight. Once (2011) there was essentially no discernible movement and once (1988) the government lost serious ground but won all of it back. Twice, the campaign made a huge difference. The drop in 2006 replaced a Liberal minority government with a Conservative one, ending more than a decade of Liberal rule and initiating nearly a decade of Conservative power. The crash in 1993 was an earthquake, so much so that the former governing party nearly disappeared from history. Usually the timing was of the incumbent's own choosing. It may be telling, however, that the two biggest blows were not so clearly self-administered: the 1993 campaign came essentially at the end of a five-year mandate, such that very little discretion remained; the 2006 campaign was precipitated by a confidence vote.

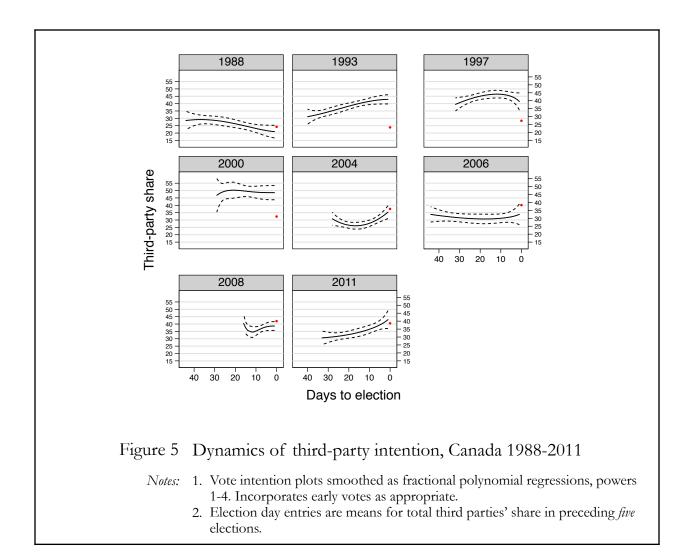
Although Canadian campaigns rarely take the electorate to the target established by the Bélanger-

¹⁰ The short time plot for 2008 does not reflect the length of the campaign, only of CES fieldwork. The dissolution of Parliament caught everyone off guard, including the academic community.



Godbout prediction model, they almost never take the electorate in the other way. The striking exception is only a partial one. The 1993 campaign, which began after the Progressive Conservative party seemingly rejuvenated itself by choosing Kim Campbell as its new leader, started with an incumbent share rather above that indicated by the prediction model. It then took the electorate toward that target, a reasonable trajectory given how bad the economy was and how weak the government's standing seemed mere months before. But the slide continued, until the fully half the incumbent's support was stripped away. The prediction model suggested that the incumbent was in for serious retribution, a share that by itself would be a serious rebuke. But something more happened to accelerate the process.

That something is the fact that the Canadian system, like that in Germany, has multiple parties. The proposition that the campaign awakens Canadian voters to the demands of Duverger's Law is almost never fulfilled, as only once in our data did the campaign reduce the third-party share. This was in 1988, when the NDP opened the campaign level with the Liberals but ended up close to its long-standing position. (Even so, the 1988 NDP share was the largest to that date.) Twice, 2000 and 2006, nothing of interest happened to the overall third-party share. Four times, the share grew over



the campaign. Least spectacular was the modest and ultimately stalled gain in 1997 as both Reform and the NDP edged up. Modestly greater and much more consequential was the gain in 2004, which saw the Bloc Québécois recover its position in Quebec and the NDP return to its pre-1993 standing. Most spectacular were the surges in 1993 and 2011. The 1993 campaign opened with a third-party share higher than ever before—reflecting Bloc and Reform beachheads—and a further surge by Reform. The 2011 campaign saw the surge by the NDP, which catapulted it to major-party status.

The Canadian pattern stands in contrast to the German one. Both countries have seen marked surges and modest declines in the overall share of third parties. In Germany, however, the big shifts occur between campaigns. Campaigns are notable mainly for how little further dynamic they add. Inter-election action in Canada is not trivial, to be sure. Reform and the Bloc made inroads before the start of the 1993 campaign. But the additional within-campaign movement dwarfed the earlier shift. The reconsolidation of the Canadian right—the merger of Reform/Alliance with the Progressive Conservatives —was consummated in 2003, yielding a relatively low third-party share in 2004. But that year's campaign reversed much of the change. The great shift of 2011 came out of the blue.

Incorporation of Fundamentals and Short-term Flux

As fundamentals are incorporated into intentions, the scope for flux diminishes. This is true whether the fundamental is of the predictable type just discussed or an "accidental" such as fitness for office. Whatever the source, this hardening of preferences shrinks the scope for further incorporation of fundamentals as well as for short-term displacement by ephemera. The critical thing is how early and how completely incorporation is accomplished.

The argument can be operationalized in at least two ways. For a set of pre-election time intervals, comparison could be effected across elections (Erikson and Wlezien 2012, p. 35 *passim*). The closer to election day the less inter-election variance there should be, with election day itself showing the least of all.¹¹ In the more limited menu of elections reported here, however, the better alternative is to make within-campaign comparisons. This means slicing each campaign into time units, calculating the variance in each unit, assembling a week-year-system data set, and then comparing the systems, time unit by time unit. This paper looks at weekly slices. Given that fundamentals are mainly conceived in terms of the major-party battle, the focus is on the incumbent.

The critical first step is to remove the error component from the total variance, so that what remains is a true representation of campaign flux. For any seven-day period, the starting point is each week's variance in incumbent intentions:

$$Var = \sum_{i=1}^{7} \frac{(p_i - \overline{p})^2}{7}$$

where p_i is the incumbent's proportion of vote intentions on the *i-th* day. As Some of this variance is just random error., we cannot take the calculation at face value. Given that each election survey comprises an integral sample, with no additional variation generated by idiosyncrasies of survey firms this random error is mainly the result of sampling. To an approximation, then, the error variance in any week is:

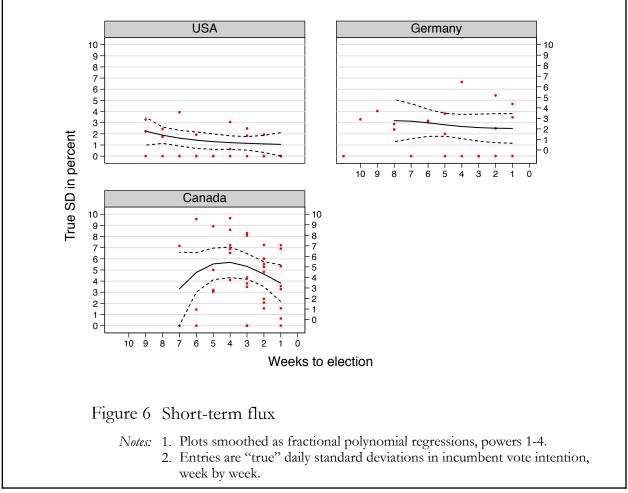
$$\frac{\overline{p}(1-\overline{p})}{n}$$

where *n* is the average daily sample size of respondents with vote intentions. The true variance is simply the total variance minus the error variance. For ease of interpretation, I convert the true variance into the standard deviation and multiply the result by 100. The weekly results are plotted, system by system, in Figure 6. To further assist comparison, the figure also includes fractional polynomial smooths and confidence intervals.

Contrary to expectation, flux is lower in the US than in either of the parliamentary systems. In line with expectation, flux is greater in Canada than in Germany. The ordering may reflect the predictability of election dates. It may also reflect the power of party identification, with Canada and

¹¹ Strikingly the biggest single drop in Erickson and Wlezien's Table 2.4 is from the last month to the day itself.

the US as polar cases (Bélanger and Stephenson 2010).



In all three systems, flux shrinks toward the campaign's end. The shrinkage is modest—indeed barely discernible—in the US and Germany. But then these systems have fixed election dates, such that even before the official start of the campaign voters have had ample opportunity to lock in considerations (Stevenson and Vavreck 2000). The shrinkage is greatest in Canada but only after a mid-campaign surge in volatility. The peak in flux comes four weeks before the end. This week typically features at least one debate and marks the start of the official advertising period. In fact, five weeks is the full duration of most of the Canadian campaigns in the data set. Only three span six weeks or more, and two of these predate 1997. Before that year, the first two or three weeks were a slow period, devoted to enumerating the electorate at the doorstep and tying up unfinished nomination business. The campaign did not gain intensity until the fifth- or fourth-last week. The 2006 campaign was longer than usual as the government fell shortly before Christmas 2005 and it was deemed necessary to extend the official campaign period into January 2006.

Conclusions and Discussion

Incumbents typically lost ground in both US and Canadian elections. No such pattern appears for Germany, and in 2005 the opposite happened. In Canada and the US, the incumbent enjoys a

tactical advantage that is not universal. Indeed, it may no longer apply in Canada. Since 2006, Canada has nominally had fixed election dates but only in 2015 did this constraint actually come into effect. The constraint does not preclude elections forced by confidence votes, and even under majority governments requires self-restraint on the part of the incumbent. Before 2015, in any case, Canadian governments chose the timing of the election. The standard pattern, going back to at least the 1950s, was for incumbents to dissolve parliament when polls are favourable (Johnston et al. 1992, p. 21). This is true even for minority governments. The pattern resembles a regression artifact: incumbents are fooled by unusual and unsustainable poll standings and pay the price as the campaign unfolds (*Ibid*.). US incumbents do not enjoy this power but they do retain discretion over when to schedule their convention. It helps that they always go second. German incumbents, in contrast to both the US and Canadian cases, have generally little scope to start a campaign under circumstances of their choosing. It is natural to ask if this logic extends more widely.

Surprisingly, prediction models exerted their greatest gravitational force in Canada and their least in the US. Not only did US electorates miss the target, the campaign took them away from it two times in three. The problem may not be so much with the logic of the argument as with the prediction models themselves. Although averaging across forecasts seems intuitively a good thing to do, a case could be made for being more discriminating. Abramowitz "time for change" model does seem to outperform the other US ones (see Abramowitz 2013), for instance. Similarly, Sides and Vavreck (2013) use a model that is essentially like Abramowitz' but with a wider range of economic factors, which are then melded by Bayesian model averaging. Their early-2012 prediction (p. 31) was quite close to the ultimate result and their updated prediction (p. 178) almost nailed the outcome. The Bélanger-Godbout Canadian model and Norpoth-Gschwend "Chancellor" model also echo the "time for change" logic. But all of the foregoing would benefit from self-conscious reflection, along the lines urged by Kayser and Leininger (2014).

On the question of incorporation of fundamentals and short-term flux, Canada may stand as the deviant case on the field. The German campaign trajectory is also more febrile than the US one but the difference between the two seems modest. Although both systems have fixed dates and, by implication, long campaigns—a critical condition for incorporation of economic effects (Stevenson and Vavreck 2000)—the US campaign is *de facto* much longer. If Canada has now truly joined the fixed-date club, its campaigns may also lengthen, at least informally. But Canada has an additional feature: it is a multi-party system operating under a "strong" electoral system, a system that punishes coordination failure. Although strategic voting by the canonical definition is uncommon in Canada (Blais 2002), there is aggregate evidence of strategic-like induction when something occurs to disturb the field. Although the plurality electoral formula usually bottles up insurgency, should insurgents cross some threshold the logic of the formula turns on its head (Rae 1971, Appendix). Twice, in 1993 and 2011, Canadian campaigns have borne witness to this logic. Are they alone?

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