

The Rational Public?
A Canadian Test of the Page and Shapiro Argument

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ABSTRACT

Over a decade ago, Page and Shapiro challenged the classical view of public opinion by arguing that Americans' collective policy preferences, instead of being volatile and meaningless, were "rational" in the sense that they were reasonable and stable over time. We propose the first non-American full test of Page and Shapiro's argument. We analyze 60 years of trends in Canadian public opinion on policy issues (1941-2001). Our results reveal that Canadian public opinion appears as stable as American public opinion. However, government acts in advance of public opinion more often in Canada than in the United States, so we argue that stability must be viewed as a reflection of collective complacency as much as it is a sign of a rational public opinion. Multivariate regression analyses of changes in public opinion further indicate that, other things being the same, the stability of public opinion is positively affected by issue salience and by the number of times a survey question is repeated. Although the positive impact of these variables on stability is consistent with the collective rationality model, we show that it can also be explained without assuming that opinion is collectively rational in the sense implied by Page and Shapiro.

Over a decade ago, Page and Shapiro (1992) challenged the classical view of public opinion by arguing that collective opinion, instead of being volatile and meaningless, was “rational.” By rational public opinion, they meant two things: (1) that the collective policy preferences of the American public are stable over time, tending toward gradual rather than rapid change, and only following developments that are relevant to the policy issues; and (2) that stable public opinion is meaningful and reasonable in the sense of providing a clearer picture of the public’s underlying interests than could be inferred from individual opinions. The thrust of their rationality argument rests upon the processes of statistical aggregation, which cancels out the distorting effects of both random errors in the measurement of individuals’ opinions and random responses given by surveyed individuals, and of collective deliberation, which enables citizens to arrive at reasonable opinions without an extensive informational base. Aggregate policy preferences, then, are not capricious but rather trustworthy.

Consensus on this view is, however, still premature. The claim that public opinion is rational is itself very controversial. But, even leaving aside this controversial claim, the lack of comparative evidence of opinion stability also explains at least in part why some authors are still not convinced that a compelling case has been made for a “rational public.” Page and Shapiro’s test of the stability of public opinion has been replicated recently by Isernia, Juhász, and Rattinger (2002) with data from France, Germany and Italy, but the replication only involves foreign policy issues. The opinion stability argument has yet to be fully tested (with data on mass opinion towards a wider range of issues, not just foreign policy) outside of the United States.

We propose to test the Page and Shapiro stability argument with Canadian data. We analyze 60 years of trends in Canadian public opinion on a variety of policy issues. Our time-

series analysis relies on 683 aggregate poll results covering 156 policy questions asked repeatedly by Gallup Canada over the period 1941-2001. The first part of the essay is a comparative description of the stability and movement of Canadian and American public opinion over time. Cross-national comparative research on this question is essential because the nature of public opinion and its role in policy making might differ in important respects between presidential and parliamentary systems. The second part of the essay uses multivariate regression techniques to test whether the stability of Canadian opinion is positively correlated with issue salience and with the number of times a survey question is repeated. In conclusion, we discuss the implications of our results for Canadian democracy in general and public policy in particular.

Is Public Opinion “Rational”?

The classical view of public opinion holds that people’s attitudes on public policy matters are highly unstable, volatile and mood-driven. In an influential study, Converse (1964) found major instability over time in individuals’ opinions about political issues. Using panel data from the 1956, 1958, and 1960 American national elections, he observed that for a substantial part of the surveyed population, responses to public policy questions shifted from one wave to the next. For Converse, this inconsistency over time in individual preferences indicated that most citizens did not have “true” attitudes about politics and thus simply answered survey questions at random. Converse’s empirical results significantly contributed to the conventional view according to which public opinion is fickle and meaningless, and cannot serve as a foundation for sound public policy (e.g., Lippmann 1925).

More recent theoretical and empirical research have sought to rehabilitate mass opinion. Scholars have demonstrated that a substantial proportion of apparently random fluctuations in

public opinion were the product of measurement error (Achen 1975; Erikson 1979; Judd and Milburn 1980; Inglehart 1985) and often reflected reasonable responses to differing cues in the survey instrument (Zaller and Feldman 1992). Other revisionist scholars have argued that shallow and unstable individual preferences may be consistent with stable and coherent collective opinion (Miller 1986; Feld and Grofman 1988). The latter argument stems from Condorcet's jury theorem. Based entirely on statistical probabilities, the theorem shows that, under certain conditions, groups tend to provide better-informed decisions than individuals. This is due to random individual errors canceling out in the aggregation process, thus generating a collective decision that has a higher likelihood of being "right" than a single individual one would.

Taking this argument one step further, Page and Shapiro (1992) proposed that, in spite of the presence of instability and inconsistency in individual attitudes, aggregate public opinion is "rational." They argue that, as the jury theorem suggests, there are emergent properties in the collective phenomenon of public opinion that make the latter coherent and meaningful, and that result mainly from the statistical process of aggregation. Since random elements of public opinion, which can be attributed as much to measurement errors as to the lack of sophistication of some citizens, tend to cancel each other out over a large sample, aggregate public opinion can express at any given moment the true distribution of the collectivity's preferences. This means that collective opinion can be sensible and predictable even if individual opinions are not. This also means that when aggregate opinion changes, it does so in reasonable response to significant social and value change.

Recent public opinion scholarship has been rather critical of Page and Shapiro's argument. The principal objection is against their second claim that mass preference is collectively rational. Mass opinion as measured by public opinion surveys may appear stable and

coherent, but that does not mean it is rational in the sense that it reflects faithfully the true beliefs and preferences of individual citizens. Indeed, some scholars contend that the rational public argument is not convincing at the micro level. Important differences in levels of information among the citizenry and in the distribution of political knowledge in the mass public are believed to affect the “quality” and representativeness of aggregate public opinion, and to induce systematic bias in majority opinion on policy issues (see Kuklinski and Quirk 2000; Converse 2000; Alvarez and Brehm 2002; Althaus 2003). The questions raised by these criticisms are important and, while we cannot test this issue directly because our study does not deal with public opinion at the individual level, we must bear in mind that the evidence of stability of collective opinion that is uncovered in this paper in no way implies a rational public.

The essay focuses primarily on Page and Shapiro’s first claim, that mass opinion is coherent and stable. Examining 50 years of aggregate public opinion data on the policy preferences of Americans, Page and Shapiro showed that collective opinion could be viewed as being “rational” in the sense that it is generally stable and predictable, and that it moves gradually and meaningfully as a result of changes in the demographic and value makeup of society, important domestic or foreign events, and transmission of new information within society. Recent studies have provided some empirical support to Page and Shapiro’s stability argument in America (Stimson 1991; Mayer 1992; Smith 1994; Knopf 1998; Erikson, MacKuen, and Stimson 2002) and in Europe (Isernia, Juhász, and Rattinger 2002). There is also partial evidence of coherence in collective preferences on political institutions (Johnston 1986), on peacekeeping (Martin and Fortmann 1995) and on some policy issues (Johnston 1986; Petry 1999) in Canada. But more complete comparative evidence would certainly go some way towards strengthening the claims of the revisionist literature.

Our research presents a test of the opinion stability argument using aggregate poll data on Canadians' policy preferences over the last 60 years. We are interested to know whether Page and Shapiro's conclusions regarding the stability of American mass opinion also apply to the Canadian case. Comparing Canada and the United States is important because, aside of obvious institutional differences, they are very much alike with respect to the mix of issues in their respective public agendas and to the role of the mass media. Americans' and Canadians' public attitudes towards policy and their government also share many similarities (Mauser 1990; Mauser and Margolis 1992; Perlin, 1997; Nesbitt-Larking 1998; Simpson xxxx).¹ Because it is so similar to the U.S. in these aspects, Canada constitutes an ideal laboratory for conducting a controlled comparison of the stability of mass opinion.

Even though Canadians appear to have become more like Americans in their values and public attitudes, their Westminster-style parliamentary institutional system has remained very different from the American presidential system. The absence of checks-and-balances and the strong party discipline in the Canadian system have contributed to concentrate powers in the hands of the prime minister to an extraordinary degree (Savoie 1999). As a consequence, the Canadian government is able to control the public and the media agendas more often than the American government can (Soroka 2002).

It is against this background that our analysis of the stability of public opinion is set. There are powerful economic and social forces that appear to compel public opinion in the two countries towards similar sets of concerns and attitudes. But at the same time, institutional

¹ A contrary view emphasizing the differences in the policy attitudes of Canadians and Americans is offered by Lipset (1990) and, more recently, Adams (2003).

differences would lead us to expect differences in their opinion environment. The implications of these differences on the stability/volatility of public opinion are not entirely clear, however. On one hand, close involvement of public opinion in policymaking in America may render mass opinion more rather than less volatile, especially if the issue under consideration is divisive. By contrast, the more deferential attitude of the public in Canada may coexist with a more complacent and hence more stable mass opinion. On the other hand, more direct involvement of mass opinion in issue resolution might promote more intense public debate, thereby increasing the quality and, ultimately, the reasonableness of mass opinion.

Data and Methodology

Available published national surveys conducted by Gallup Canada between 1941 and 2001 were inspected for repeated questions on policy preferences. The aggregate survey data – the marginal frequencies of responses – were drawn from the *Gallup Report* and, for a limited number of cases, from Fletcher and Drummond (1979) and Sanders (1996). Only those polls dealing with public preferences on an identifiable question of national policy were used in the analysis. These policy questions also had to have been asked with identical wording at least twice during the 60-year period to be included in our dataset. It was important that question wordings be identical because, as Monroe (1998: 9) points out, “different question wordings produce different levels of support for a policy, but comparisons of the same wording across time provide a consistent measure of change.”

For each poll, the reported opinion was recorded as either favoring or opposing the policy change raised in the survey question.² A total of 683 repeated polls over 156 survey items were found, resulting in 527 instances of potential opinion changes – an average of 4.4 repeated polls per item. These policy questions thus provide a substantial database for analyzing opinion change. To our knowledge, they constitute the most extensive collection of trends about Canadians' policy preferences yet assembled. They address a large variety of policy issues and they cover virtually every existing policy domain. Domestic policy areas include civil rights (28% of all items), government administration (16%), welfare (15%), and the economy (31%). Sixteen items (10%) concern foreign affairs or national defense.

This dataset is not as large as Page and Shapiro's, who accumulated repeated polls on 1,128 policy items. At least two reasons can explain this difference. First, Page and Shapiro gathered all available political questions from five polling organizations, often ending up using survey questions asking for rather vague policy preferences and concerning executive, legislative and judicial policies at all levels of government (1992: 43-44). We wanted to be more restrictive in our selection process, and to only use survey questions clearly referring to identifiable national policies and to governmental actions at the federal level. Second, Canadian researchers do not have access to the same amount of opinion surveys as their American colleagues, especially when it comes to surveys dealing with citizens' policy preferences. Gallup Canada usually asks around 15 to 20 policy questions a year (sometimes as much as 30 to 40) and this rate was even lower before the mid-1970s.

² Answers to questions that had more than two response categories were merged so as to dichotomize the preferences into favoring either 'change' or 'status quo' in policy. Polls that gave respondents a choice of increasing, maintaining, or decreasing levels of government intervention or spending were excluded because they cannot be operationalized within our dichotomous framework.

In general, our methodology follows that of Page and Shapiro (1992: 44). For each of the 683 polls included in the dataset, we first recomputed the dichotomous marginal frequencies of responses so as to exclude “don’t know” and “no opinion” responses. This was done in order to track the balance of opinion among those people actually holding opinions, and to provide a definition of opinion change as large as possible.³ We then proceeded to ascertain whether or not any significant change in opinion occurred, taking sampling error into account. Since the samples used in most of the surveys considered have a 3% margin of error with a confidence level of 95%, we defined a statistically significant instance of opinion change as a shift in response frequencies of 6 percentage points or more between two consecutive repetitions of a survey question. Whenever significant changes occurred – whether only once, or more than once if an item was repeated several times – we classified each as a separate *instance* of change, to be used as a unit of analysis for investigating the magnitude and rapidity of opinion changes that did occur.

Findings

Stability and Change in Collective Opinion

The first question of interest is just how much change and how much stability are found in the Canadian data as compared to the American data. Table 1 presents comparative evidence of significant changes in collective policy preferences. Of the 527 pairs of Canadian survey questions, about 40% reveal a shift of 6 percentage points or more. This figure is close to the one presented in Page and Shapiro (1992: 45), except that their figure of 42% is based on *policy items* as a whole rather than on successive *question pairs*. That is, they considered an item as revealing

³ See Page and Shapiro (1992: 423n.8) and Isernia, Juhász, and Rattinger (2002: 209).

change the moment they found at least one instance of significant opinion change within the item. Using this method, we find instead that 63% of Canadian items show at least one significant shift in opinion.

[TABLE 1 ABOUT HERE]

One reason for the difference in results could be that, as Mayer (1992: 114n.5) argued, Page and Shapiro's dataset is somewhat biased in favor of non-change – something the authors themselves acknowledge.⁴ Their 655 survey questions classified as “stable” were repeated 2.5 times, while their 473 items showing change were repeated 3.5 times (on average). By comparison, our stable items were asked 2.8 times and our items revealing at least one significant opinion change were repeated 5.3 times (on average). We were forced to classify as “revealing change” a large number of frequently repeated items that were generally stable and that covered many decades, but that often showed only one or two instances of significant change over time.⁵ We believe this is the main factor that accounts for the differing figures in Table 1 with regards to the frequency of change in items. We would also argue that the frequency of change in successive question pairs is a more reliable indicator in assessing the degree of stability and change in collective opinion since this measure is based on all possible instances of opinion change observed within each item. It thus provides a more stringent test of Page and Shapiro's argument. Our finding that up to 60% of question pairs reveal no significant opinion change should be appropriately compared with Page and Shapiro's finding of 58% item stability.⁶

⁴ “Many (232, or 49%) questions with significant changes were asked at only two time points, so they could not reveal any fluctuations in opinion; some were repeated with long time intervals between surveys, so that any abrupt changes would not be likely to show up either” (Page and Shapiro 1992: 60).

⁵ For example, one question asking if immigration in Canada should be increased was repeated 20 times over a period of 26 years and showed only two small significant shifts in opinion (8 percentage points between 1982 and 1985, and 6 percentage points between 1998 and 1999).

⁶ Page and Shapiro do not present results based on pairs of repeated questions, an odd decision considering that the rest of their discussion of opinion change rests upon figures based on question pairs.

Canadian public opinion, then, appears strikingly stable over time. It is not impervious to change either, but as Table 2 shows, most of the 211 changes that did occur were rather small. More than half of them (124, or 59%) were less than 10 percentage points. Most of those involved preference shifts of 6 or 7 percentage points – statistically significant but hardly impressive. Moreover, if we compare with the American results reported in Page and Shapiro (see first row of Table 2), we can see that opinion changes in Canada appear smaller than those observed in the United States. Only 19 instances of significant change (9%) revealed opinion shifts of 20 percentage points or more. Among the most noteworthy cases, opinion became much more favorable towards civil service strikes, the mandatory use of seat belts in cars, the privatization of government-owned PetroCanada, a maximum four-year term for government, and the participation of Canadian armed forces in the 1991 Gulf War. There were also huge drops in support for wage and price controls to fight inflation during the 1970s, and for the possibility of amnesty to illegal immigrants (the largest opinion shift observed: 34 percentage points between 1983 and 1988).

[TABLE 2 ABOUT HERE]

To further verify the extent to which Canadian public opinion moved during the 60-year period, we classified the 211 instances of opinion change according to whether they were gradual, abrupt, or fluctuating. Following Page and Shapiro, a change is considered “abrupt” if it occurred at a rate of 10 percentage points or more per year.⁷ We also included as abrupt any significant (6 percentage points or more) change that occurred within seven months. A “fluctuation” was defined by the number of successive reversals in direction of significant change within a given time interval. We took two or more significant changes in opposite directions

within two years, or three or more within four years as constituting a fluctuation. Gradual changes are shifts in opinion that are neither abrupt nor part of a fluctuation.

Overall, many of the changes in policy preferences we found involved gradual trends. We found 47 cases of abrupt changes (22% of the 211 instances of significant change) in our dataset, and 19% of our 156 items showed at least one abrupt change in opinion. By comparison, 41% of significant changes found in the United States by Page and Shapiro (1992: 54) were abrupt.

Figure 1 presents an interesting case of abrupt changes in Canadian public opinion. Up to 1988, general attitudes towards free trade with the United States were either stable or moved gradually, even during the 1943-1983 period not shown in the figure. Since 1988 however, we can observe six abrupt changes on the question pertaining to the Free Trade Agreement (FTA) and two more abrupt shifts related to the North American Free Trade Agreement issue (NAFTA). This example suggests that Canadian attitudes are more volatile when faced with actual trade agreements than on the more general question of trade liberalization (see also Clarke et al. 1991: 79).

[FIGURE 1 ABOUT HERE]

Figure 1 also offers examples of fluctuations in public opinion. Two fluctuations can be observed on the FTA issue between 1988 and 1989, while two more can be found on the NAFTA question between 1992 and 1994. Such fluctuations in Canadians' policy preferences, however, appear to be uncommon. Of the 97 items repeated frequently enough to detect fluctuations, only 16% showed at least two successive opinion changes in opposite directions. This result is nearly identical to Page and Shapiro's (1992: 58) who detected fluctuations in 18% of questions asked at three or more points in time. Apart from the two free trade agreement items, we found fluctuations in opinions regarding legalization of abortion, wage and price controls, the "Buying

⁷ The rate of change was calculated by dividing the magnitude of change by the time interval over which it

Back Canada” program, the Meech Lake constitutional accord, and the recognition of Quebec as a “distinct society” in the Canadian constitution.

In addition to assessing whether public opinion at the margins was stable, we also wanted to verify the extent to which there were contradictory majorities in Canadian policy preferences (see Johnston 1986: 217). Contradictory majorities are defined as cases where majority opinion can be found to support either side of a policy issue (change or status quo in policy) depending upon the moment it is measured. Sampling error was again taken into account in operationalizing contradictory majorities. Each policy item showing at least one significant shift (6 percentage points or more) in majority opinion was considered as presenting a case of contradictory majorities. In other words, the movement in policy support had to go from 47% (or less) to 53% (or more) – or vice versa – to be considered as representing a statistically significant switch in the direction of majority opinion.

All 156 policy items were examined in order to detect changes in the direction of majority preferences. Nearly one fifth of all items (28, or 18%) revealed at least one instance of contradictory majorities in opinion. This number is comparable to the proportion of abrupt changes (19%) or fluctuations (16%) we previously observed in these same items. Only 5 of the 28 items revealed more than one change over time in the direction of majority opinion. One of these cases, support towards the FTA, appears in Figure 1. Majority opinion on this particular item jumped back and forth between 1988 and 1990, opposing the agreement at one point, then supporting it at another before opposing it again. Other noteworthy cases of contradictory majorities are observed on questions related to the break-off of continuing ties with the British monarchy, the ban on strikes in the civil service, regional development spending, and financial

occurred.

assistance to unemployed people in the country's poorer regions. Contradictory majorities appear to be more frequent on questions of welfare and foreign policy; nearly a third of all items in each of these two policy areas present contradictory majorities.

We do not want to downplay the fact that Canadian public opinion displays abrupt changes, fluctuations, and contradictory majorities. Nonetheless, the overall story, as in the case of the United States, is one of a generally stable Canadian public opinion. Two examples of stability and gradual change in opinion appear in Figure 2. Favorable attitudes towards an increase in immigration remained low throughout the 1975-2001 period, with very few significant ups and downs. And public opinion gradually moved towards higher levels of approval of mercy killing, with the majority opinion increasing by about 30 percentage points over a period of nearly 30 years.

[FIGURE 2 ABOUT HERE]

The data provide little evidence, therefore, that Canadian public preferences are volatile, or tend to move wildly over time.⁸ It also appears that the Canadian public is slightly more gradual in its opinion movements than the American one (Page and Shapiro 1992: 60-61). Among the 211 instances of significant opinion change, 66% were gradual – neither abrupt nor part of a fluctuation (59% in the United States). And as much as 69% of our 97 policy items repeated at three or more time points involved gradual changes or no change at all, while this proportion drops to 45% in the American case.

⁸ A simple multivariate regression analysis of opinion change confirms the strong element of inertia in Canadians' policy preferences. Since collective opinion appears generally stable, and opinion changes are more gradual than abrupt, we would expect that the level of support for a particular policy in one survey is a very strong predictor of the level of support for that same policy in a subsequent survey. One way to verify this is to regress the level of opinion at t upon the level at $t-1$ using ordinary least squares and controlling for policy areas. For our 527 question pairs, we obtain an unstandardized regression coefficient of .91 for opinion at $t-1$, and a R^2 of .86. Even if we restrict the sample to the 211 instances of significant opinion change, opinion at $t-1$ remains a strong predictor of opinion at t (regression coefficient of .76 and R^2 of .62). These figures reveal a very high degree of stability in public opinion.

Explaining Aggregate Opinion Change in Canada

We propose several explanatory hypotheses of opinion change in Canada. These hypotheses will be tested with a multivariate analysis that will first explore the impact of four independent variables on opinion movement. These variables are the time interval between polls, the time period, policy areas, and issue salience. We also present and discuss results related to a fifth explanatory variable: the number of times a survey is repeated. Other variables (such as the socio-economic status of individual survey respondents) certainly have an important effect on the volatility of public opinion, but testing their impact would necessitate a different research design than the aggregate-level one used in this paper.

It is logical to assume that the bigger the time interval between two successive polls, the greater the probability of detecting a significant change in opinion. If public opinion moves in response to new environmental stimuli (or shocks), the larger the time interval between two polls, the larger the number of potential shocks and therefore, the larger the amplitude of the change. Put differently, if collective opinion is completely random, we should observe no systematic difference between opinion shifts occurring over short periods and those recorded over long periods of time. We use the number of months separating two successive repeated polls as an indicator of the time interval between polls.

Another explanatory variable is the time period in which a poll is taken. Consistent with the collective rationality model, Page and Shapiro argue that citizens are better educated and more informed about public policy today than they were 60 years ago.⁹ The collective rationality model also assumes that public opinion made out of ignorant citizens tends to be more volatile,

whereas informed citizens make up a more stable collective opinion. If ignorant opinion is more volatile than knowledgeable opinion, and if there are less ignorant citizens (in proportion) today than 60 years ago, then we should expect to find more important movements of opinion at the beginning of the period under study because citizens were less informed about policy issues on average and hence more likely to change opinion on those issues. The problem with the expectation of increased opinion stability over time is that the collective rationality assumptions on which it is based do not appear supported by the empirical evidence. First, the claim that the collective opinion of ignorant citizens should be more volatile than the collective opinion of knowledgeable citizens is strongly contested by Althaus (2003) who demonstrates that ill-informed opinion is often more stable than well-informed opinion.¹⁰ Second, even if well-informed opinion were more stable than ill-informed opinion, there is no reason to believe that citizens are better informed about policy issues today than they were in the past (see Delli Carpini and Keeter, 1996, for the United States and for Canada, Johnson et al . 1996 and Fournier 2002).

If time has a positive impact on opinion stability this has probably more to do with technical factors associated with sampling methods than with opinion rationality considerations. Gallup's sampling methodology has been improved and refined since the 1940's. Because they rely on larger samples and more reliable instruments, the repeated surveys of today lead to smaller inter-sample variability (Whalen 1977), thereby providing a more stable measure of public opinion than was the case 60 years ago. To test for the possible impact of the time period

⁹ They state page 357 that "the rational public revealed by recent survey data may be partly a creation of the twentieth-century system of public and private formal education together with the modern media and mass communications."

¹⁰ Althaus states page 83 that "contrary to the predictions of collective rationality models, ill-informed opinion is usually less evenly dispersed than well-informed opinion."

on opinion stability, we use the year of polling as an indicator, that is the year of the second survey for each pair of successive polls.

The frequency of change in public preferences might also be contingent upon the policy area involved. A well-known argument in the literature (the “mood theory”) suggests that public opinion on foreign policy issues is ill informed and highly volatile – more so than on domestic policy issues (see Knopf 1998 for a review). Recent studies in Canada (Martin and Fortmann 1995), the United States (Knopf 1998) and Europe (Isernia, Juhász, and Rattinger 2002) have shown, however, that collective opinion on foreign policy was neither random nor unpredictable, but could be characterized as rational. We test whether opinions on foreign policy issues (including national defence) are more prone to change than attitudes towards domestic policy issues with a dummy coded 1 for foreign policy issues and 0 for domestic issues. Within domestic policy issues, we also check whether collective opinion moves differently on questions of civil rights, government administration, welfare, and the economy using similar dummies.

A fourth explanatory variable is issue salience. Policy issues that are particularly salient to the public should exhibit less opinion volatility. Salient issues usually attract more interest and attention, and are more thoroughly debated among the public. Hence, people should possess more information about these issues, resulting in stronger, more intensely held, and therefore more stable, opinions (Erikson and Luttbeg 1973: 29-30; Althaus 2003: 179). Issue salience is measured for each poll by the proportion of respondents answering “don’t know” or “no opinion” to the question: the higher the percentage of non-response, the less salient the issue.¹¹ It is, therefore, hypothesized that opinion change will correlate positively with the measure.

¹¹ This measure of issue salience is used in studies of opinion-policy relationship (e.g., Page and Shapiro 1983; Brooks 1990; Petry 1999). It is not a perfectly valid measure: a high proportion of “don’t know” responses may be a sign of low salience, but in some cases it may also be a sign of indecision on salient and contentious issues.

We test the effect of these four variables on opinion movement using multivariate regression methodology (either ordinary least squares or logistic) with robust standard errors, using the Huber-White sandwich estimator of variance to address potential problems of heteroskedasticity. Because of the cross-sectional nature of the dataset, residuals cannot be assumed to be independent within policy items. For this reason, a cluster specification identifying the policy question to which each observation (i.e., each survey) belongs is introduced in every regression analysis.

Ordinary least squares (OLS) estimates from a first multivariate regression model appear in Table 3. The model is tested on all 527 question pairs. The dependent variable is the actual percentage-points absolute change in opinion observed for each pair (the variable's range goes from 0 to 34). The model shows that the most important explanatory variable of opinion change is time. The statistically significant positive impact of the interval of time between two repetitions of a survey question indicates that public opinion tends to change more on long term than on short term. This would not be the case if public opinion were moving entirely at random. It also appears that the magnitude of change in opinion has slightly, but significantly, diminished over the period, suggesting that the variability between successive Gallup surveys has been reduced as the accuracy and reliability of the survey instruments have improved over time. The data suggest that opinion changes occur significantly more often on economic issues than on welfare. However, attitudes towards foreign policy issues do not appear more volatile than opinions on domestic policy matters. This result can possibly be attributable in part to the increasing "domestication" of Canadian foreign policy, which makes foreign policy issues undistinguishable from domestic ones (Stairs 1978; Thérien and Noël 1994). Finally, the impact

of issue salience on opinion movement is statistically significant and of the expected positive sign. In other words, the less salient an issue, the more policy preferences are volatile.

[TABLE 3 ABOUT HERE]

Table 4 presents three logistic regression models that use as dependent variables the binary codings identifying the presence of non-gradual opinion changes as discussed in the preceding section. The first model is based on the 211 instances of significant opinion change, and tests whether issue salience and policy areas can account for abrupt changes.¹² The results show that, compared to welfare issues, the odds of opinion changes on economic issues being abrupt are multiplied by four. Issue salience also appears to have a significant effect on abrupt changes: the less salient an issue, the more abrupt the opinion change. This result suggests that while opinions on salient policy issues are not impervious to change, they are more stable than policy preferences on less salient issues because when they do change, they appear significantly less prone to move abruptly. Cases selected for the second logistic regression model are further restricted to instances of significant opinion change for items in which it was possible to determine whether opinions fluctuated (N=161). Policy domains and salience of issues do not, however, seem to significantly affect the presence of fluctuations in Canadian public opinion.

[TABLE 4 ABOUT HERE]

Table 4 also presents a third logistic regression model in which the dependent variable takes the value of 1 when a policy item shows contradictory majorities, and 0 otherwise. The same independent variables as in Table 3 (though in different form in the case of time¹³ and issue

¹² For the first and second regression models of Table 4, time was left out of the equations since units of analysis in both cases are opinion changes in the first place, and time was already taken into account when coding abrupt changes and fluctuations.

¹³ Since the unit of analysis in the third regression model of Table 4 are items, we drop the 'year of poll' variable, and we add up the total number of months covered by each item as an indicator of time, with the expectation that the

saliency¹⁴) are included on the right-hand side of the equation. The results show that time does not have a significant effect on the presence of contradictory majorities in survey items. They also indicate that contradictory majorities occur significantly less in civil rights and the economy than in welfare. As in the case of abrupt changes in opinion, issue saliency has a significantly negative effect on the presence of contradictory majorities in Canadian policy preferences. Everything else being equal, a one-unit increase in our saliency indicator (which really means a one-unit *decrease* in saliency) results in a 8% increase in the odds of finding contradictory majorities. There are a few exceptions to this general rule, however, as salient issues like the adoption of the FTA show (see Figure 1). But in general, the finding is robust (confirmed in three out of four regression equations): majority preferences appear significantly less stable and clear-cut on less salient policy issues.

Finally, we look at a fifth variable that might further help explain opinion change at the aggregate level, that is the number of times a survey is repeated. It is plausible to expect the magnitude of opinion change to drop as a poll is repeated over time. With repeated surveys the public can learn to recognize and understand the issue, in part because of education or mobilization by the elites. The result may be that public opinion becomes more crystallized as the issue progresses over the policy cycle. As V.O. Key (1961: 270) once suggested: “from time to time questions arise that command general attention and set off wide discussion, which eventually crystallizes an opinion not readily explicable as an unthinking reaction.” Page and Shapiro’s (1992: 12-13) and Isernia, Juhász, and Rattinger’s (2002: 265) studies both allude to this possibility without providing the evidence. The proposition that citizens acquire new knowledge

longer the time span of an item, the higher the probability of detecting change in the direction of majority opinion on the issue.

¹⁴ We use an indicator of *item* saliency in the third regression of Table 4, which corresponds to the average proportion of “don’t know” or “no answer” responses given to each repeated polls asked on a given item.

as similar polls get repeated is questionable theoretically (it contradicts the assumption of uninformed individual opinion). A less demanding hypothesis is that repeated polls do not affect the level of knowledge of most citizens (which remains low), but they constitute cues that facilitate the use of cognitive shortcuts that help citizens overcome their lack of political knowledge and act as if they were fully informed. For example, the increase in stability as a poll is repeated identically over time could result from on-line processing (Fiske and Taylor 1991). Citizens may process the information from repeated polls “on-line”, at the time they are exposed to it, update their opinion based on the new information, and then quickly forget the information itself while retaining the updated summary judgment. Thus citizens may express informed opinion despite being unable to recall the actual information used to shape their opinion. Such information shortcut process might have two observable effects on collective opinion. First, it might diminish non-response and hence increase the salience of the policy issue in the public mind. Second, it might gradually diminish the gap between informed and uninformed citizens, resulting in a more stable public opinion.

Some scholars question the empirical validity of the claim that the use of cognitive shortcuts helps uninformed citizens act as if they were fully informed. Althaus (2003) demonstrates that the use of shortcutting strategies rarely help American citizens to express opinions similar to those they would give if they were better informed. In Canada, Johnston et al (1996: 250) show that information shortcuts during the 1992 constitutional referendum “did not close the gap [...] between the poorly and the well informed.” Based on the contrary evidences presented by Althaus and Johnston et al., we should expect that repeated polls have no impact on opinion stability.

These contradictory expectations are tested in Table 5. The repeated survey variable is operationalized as a counter starting with 1 for the first poll on a given issue, 2 for the second poll, and so on. If Page and Shapiro are correct, the variable should correlate positively with issue salience and with the stability of public opinion by hypotheses. According to Althaus's null hypothesis, the variables should not be correlated at all. The table indicates that the variable for the repeated surveys has a positive and statistically significant effect on both issue salience and opinion stability. In general, with each new poll, the non-response rate on the same issue diminishes by 0.15 percentage point. The effect of repeated polls on the magnitude of opinion change is also substantial: each time the Canadian public is questioned again about a given policy, the aggregate movement of opinion observed since the last time the question was asked is reduced by about 0.16 percentage point. This effect is significant notwithstanding the time interval between the two polls, the time period in which the poll was taken, as well as the policy area and the salience of the issue. The variable's significant impact suggests that, as an issue is repeated in the polls, it becomes more salient to the public, and opinion on this issue stabilizes in the process.¹⁵

[TABLE 5 ABOUT HERE]

¹⁵ We tested for the possibility of an "issue-attention cycle" whereby policy issues gradually become salient to the public before fading into the public mind after some time (see Downs 1972). We proceeded by squaring the number of times each survey was repeated, and then by adding this squared variable to the equation of Table 5, column 1, with the expected coefficient signs being negative for 'repetitions' and positive for 'repetitions-squared' (remember that our indicator of issue salience is the percentage of non-response). The results were not significant and the signs of both coefficients went contrary to expectations.

Conclusion

A systematic examination of repeated Canadian public opinion polls on a wide range of policy issues over a 60-year period reveals considerable stability in Canadians' policy preferences. When collective opinion did change, opinion movements were usually gradual instead of wild and unpredictable. A small proportion of significant opinion changes were abrupt or part of a fluctuation. Our study also revealed the presence of a few cases of contradictory majorities in Canadian public opinion. However, as with Page and Shapiro's study of American policy preferences, the more general pattern appears to be one of gradual change or no change at all.

Looking for possible determinants of opinion stability, we find that stability is positively affected by the time period, by issue salience, and by the number of successive polls on the same issue. The R-squares in the regressions of tables 3 through 5 may be small, but this is perfectly understandable. A much larger proportion of the variance in opinion volatility could be explained if we had data on individual levels of knowledge about policy issues. The positive correlations between issue salience, the number of successive polls, the time period and the stability of opinion could be due to collective rationality in the sense implied by Page and Shapiro¹⁶ However, we have shown that these positive correlations can also be explained without assuming that Canadian public opinion is collectively rational.

Another point of departure from Page and Shapiro concerns our diagnosis of the consequences of stability for policy and, more generally, for representative democracy. Page and Shapiro view the stability of public opinion in a favorable light because they implicitly assume

¹⁶ In their book, Page and Shapiro (1992) suggest that the stability of public opinion is a result of collective rationality. They write page 386 : "The reason for these [stability] findings may have to do with the offsetting effects of random opinion movements by individuals, and with collective deliberation, so that collective public opinion can remain stable or respond coherently, even while many individuals' responses shift randomly.

that opinion leads and precedes policy. In their interpretation, evidence of stability means that opinion constitutes a reliable guide to policy decisions, whereas the presence of unstable public opinion raises doubt about the capability (and the morality) of mass opinion to influence policy. Opinion stability is important because of the fear that the public policies of a democratically responsive government will be irrational or unreasonable if they reflect too closely an unstable and volatile public opinion. A positive correlation between stability and issue salience would suggest that such fear is unfounded because instability is mostly circumscribed to low salience issues. Rational politicians have little incentive to follow public opinion on low salience issues. Instead, they will try to be responsive to public opinion on highly salient issues because these issues have a major impact on individual voting decisions. If opinion leads policy, it would indeed be a good thing that opinion stability increases with issue saliency.

A similar argument could be made about our finding that opinion becomes more stable as a survey is repeated over time. Assuming that opinion precedes policy (so that government decision is the final stage in the process) the finding that public opinion stabilizes toward the end of the process, as we get nearer the decision stage, would be a good sign. By contrast, if opinion volatility increased as we get nearer decision time, that would be bad news from a democratic responsiveness point of view.

But a number of scholars, especially outside of the United States, have pointed out the possibility that policy leads opinion, in which case mass opinion must be seen as endogenous, not exogenous (Bourdieu 1973; Ginsberg 1986; Margolis and Mauser 1989; Champagne 1990; Blondiaux 1998; Maravall 1999; Jacobs and Shapiro 2000). While we cannot directly address this debate, it is important to emphasize that the government acts in advance of the electorate more often in Canada than in the United States. When Canadian opinion is congruent with policy

is it far more likely because opinion defers to government authority than because decision makers respond to public opinion (Howlett and Ramesh 2003; Mauser and Margolis 1992; Petry and Mendelsohn, forthcoming). If policy leads opinion (a serious possibility in Canada) then the evidence of stability of opinion must be looked at in a different, less optimistic light. The positive correlations that we observe between opinion stability, issue salience, and the number of repeated polls could be the result of spurious relations prompted by the effect of elite influence. A well-known example of elite influence scenario is issue-priming, where repeated polls are used to increase the relative salience of an issue in the public, thereby increasing opinion stability, but only as a side effect. More generally, if policy leads opinion, stability may not be as reasonable or functional as the collective rationality model assumes. Opinion stability may reflect public complacency whereas fluctuations in public opinion and contradictory majorities may indicate that democratic debates and arguments have a chance. Far from being dysfunctional, fluctuations in public opinion might be an element that contributes to the good operation of liberal democracies.

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**Table 1. Frequency of Significant Changes in Collective Opinion
on Repeated Policy Questions**

	No Change		Change		Total	
	%	(N)	%	(N)	%	(N)
United States (by items)	58	(655)	42	(473)	100	(1,128)
Canada: by pairs	60	(316)	40	(211)	100	(527)
by items	37	(58)	63	(98)	100	(156)

Source for the U.S.: Page and Shapiro (1992: 45).

**Table 2. Magnitude of Significant Changes
in Collective Policy Preferences (By Question Pairs)**

	6-9%		10-19%		20%+		Total	
	%	(N)	%	(N)	%	(N)	%	(N)
United States	44	(242)	43	(241)	13	(73)	100	(556)
Canada	59	(124)	32	(68)	9	(19)	100	(211)

Source for the U.S.: Page and Shapiro (1992: 46).

Table 3. Determinants of General Opinion Change

Independent Variables	B	S.E.
Foreign policy	.38	(1.20)
Civil rights	.30	(0.68)
Government administration	.41	(0.81)
Economy	1.43	(0.80)*
Issue salience (non-response rate)	.06	(0.03)*
Time interval between polls	.03	(0.01)***
Year of poll	-.06	(0.02)***
Constant	123.77	(41.39)***
Adjusted R ²	.11	
N (pairs)	527	

Entries are unstandardized OLS regression coefficients with robust standard errors in parentheses. The excluded policy domain is Welfare.

* $p < .10$; ** $p < .05$; *** $p < .01$ (two-tailed)

Table 4. Determinants of Non-Gradual Opinion Changes

Independent Variables	Dependent Variables					
	Abrupt Changes		Fluctuations		Contradictory Majorities	
Foreign policy	.85 (1.04)	<i>2.33</i>	-.75 (1.16)	<i>0.47</i>	-.36 (0.72)	<i>0.70</i>
Civil rights	.46 (0.88)	<i>1.58</i>	-.81 (0.99)	<i>0.45</i>	-2.28 (0.85)***	<i>0.10</i>
Government administration	.97 (0.87)	<i>2.63</i>	-.30 (1.15)	<i>0.74</i>	-1.02 (0.74)	<i>0.36</i>
Economy	1.39 (0.83)*	<i>4.03</i>	.01 (0.90)	<i>1.01</i>	-1.32 (0.62)**	<i>0.27</i>
Issue salience	.08 (0.03)**	<i>1.08</i>	.04 (0.03)	<i>1.04</i>		
Item salience					.07 (0.03)**	<i>1.08</i>
Time span covered by item					.00 (0.00)	<i>1.00</i>
Constant	-3.05 (0.82)***		-1.22 (0.82)		-1.44 (0.55)***	
Pseudo-R ²	.11		.04		.03	
N (pairs)	211		161			
N (items)					156	

Entries are logistic regression coefficients with robust standard error in parentheses. The italicized numbers are the odds ratios. The excluded policy domain is Welfare.

* $p < .10$; ** $p < .05$; *** $p < .01$ (two-tailed)

Table 5. Evidence of an Opinion Learning Process at the Aggregate Level

Independent Variables	Dependent Variables	
	Saliency (Non-Response)	Opinion Change
Foreign policy	2.00 (1.57)	.74 (1.09)
Civil rights	-.68 (0.81)	.49 (0.69)
Government administration	7.36 (2.27)***	.61 (0.80)
Economy	4.96 (1.17)***	1.71 (0.75)**
Issue saliency		.06 (0.03)*
Time interval between polls		.03 (0.01)***
Year of poll		-.05 (0.02)**
Number of times a poll is repeated	-.15 (0.08)*	-.16 (0.07)**
Constant	7.37 (0.68)***	95.95 (42.97)**
Adjusted R ²	.21	.12
N (polls)	683	
N (pairs)		527

Entries are unstandardized OLS regression coefficients with robust standard errors in parentheses.

The excluded policy domain is Welfare.

* $p < .10$; ** $p < .05$; *** $p < .01$ (two-tailed)

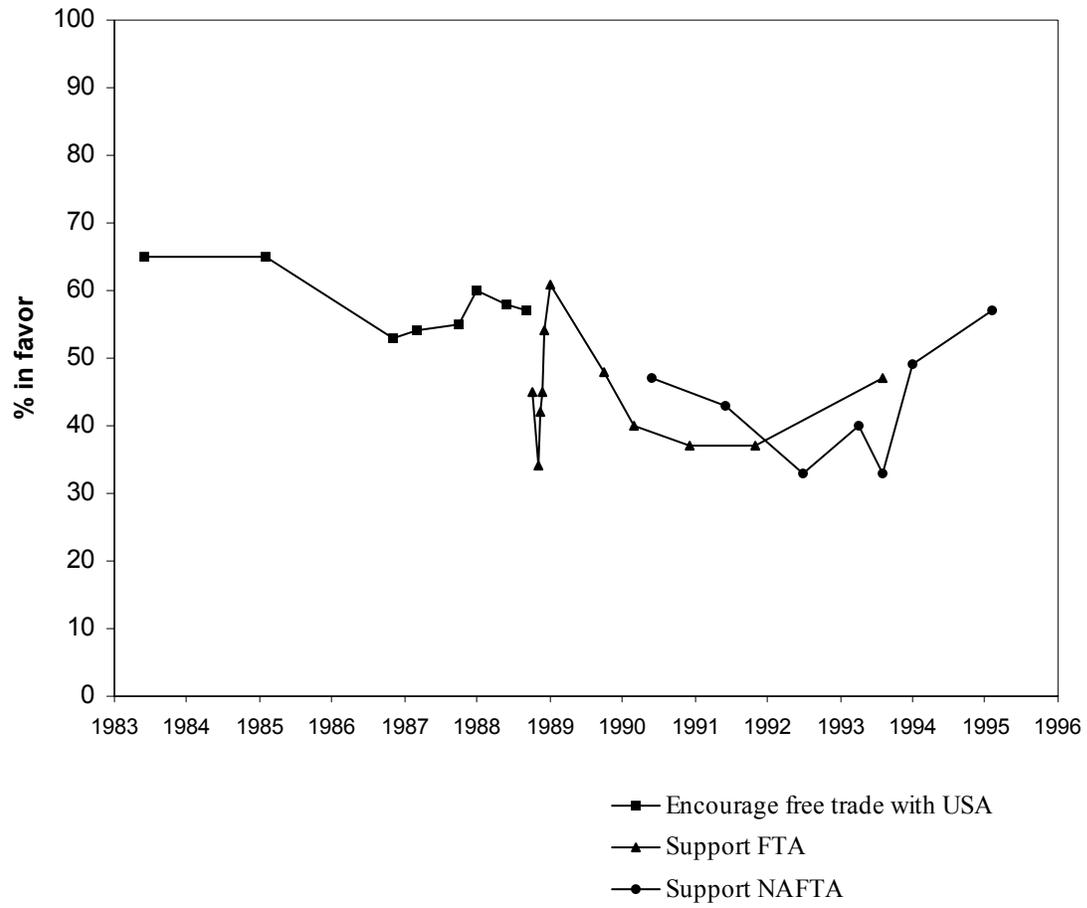
Figure 1. Attitudes Towards Free Trade, 1983-1995

Figure 2. Examples of Stability and Gradual Change in Canadian Opinion