Notes and Comments

The Impact of Issue Preferences on Voting Choices in the Swiss Federal Elections, 1999

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This Note presents a study of the impact of issue positions of political parties on electoral choice. Together with economic performance and the popularity of leaders and candidates, issue-specific considerations are the main ‘short-term’ forces influencing the voting choices of individual voters. Issue voting has been shown to matter in a large number of studies. Most recently, Alvarez et al. have demonstrated the power of issues in British general elections, which have long been known as an important case of class voting.\(^1\) They argue that one should no longer debate whether issues (and the economy) matter in British elections: ‘Instead, the focus should shift from whether to how much and to how their influence in particular elections compares to their influence on other British elections, and to elections in other nations.’\(^2\)

This Note contributes to this debate. Based on data from the 1999 Swiss election panel study, we show what kind of impact certain issues had on electoral choice. To that end, we elaborate on the classical work of Lazarsfeld et al.\(^3\) According to these authors, an electoral campaign can have three different effects: it can reinforce a prior decision, activate or crystallize latent predispositions, or modify a prior voting choice. While we have borrowed this theoretical framework from Lazarsfeld and his collaborators, we are innovating in applying it to issue-specific voting. Additionally, we take into account a fourth possible effect, namely that the electoral campaign can demobilize voters who initially had a particular voting intention. In our view, then, there are four mechanisms through which issue-specific considerations can influence the electoral choice: In addition to their contribution to a change in voting choice – the most spectacular but not the most frequent effect of an electoral campaign – issue preferences can reinforce the voters’ original intentions, activate or crystallize their latent predispositions, or demobilize them.

We do not expect issues to have a consistent effect on voters’ decisions. Quite to the contrary, we assume that the impact of issue preferences varies both across issues and across political families. According to our first hypothesis, only issues that are highly familiar and polarizing, and which address a problem of the highest priority, have a strong short-term impact on voting choices. Next, we hypothesize that parties with a high profile on such crucial issues are most likely to benefit from the mechanisms of reinforcement, crystallization and conversion. However, such a high profile also has a price: according to our third hypothesis, parties with a high profile are likely to lose voters who initially intended to vote for them, but who do not share their issue preferences; such voters may either convert to another party or demobilize. By contrast, parties without high issue-specific

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profiles are less likely to suffer from demobilization, but more likely to lose voters to more extreme parties (conversion).

While the relevance of issue voting has been inconclusive in the British case, the same may be said to be true of the Swiss elections. It has been argued that the direct democracy practised in Switzerland modifies the characteristics of Swiss elections. By allowing citizens to vote on specific issues several times a year, Swiss direct democracy has been said to focus electoral choice on partisan and personality characteristics. According to this argument, if issues are decided by popular votes, elections may no longer be decided by policy preferences. Thus, analysing the electoral choice in the federal elections of 1995, Schloeth comes to the conclusion that issue voting played only a limited role in these elections. In that sense, Switzerland can be seen as a ‘test case’ with respect to the impact of issue-specific considerations: if our fourfold conception of issue voting holds for Switzerland, we can be confident that it can also be applied to elections in other countries.

The structure of this Note is as follows. In the first section we develop our theoretical argument regarding the impact of policy preferences on electoral choice. We start with a discussion of the various effects an electoral campaign can have on the voting choices, and highlight how issue-specific considerations can contribute to these effects. The second section provides some basic information about the context of the 1999 federal elections (the characteristics of the Swiss party system, the intensity of the electoral campaign, the most important political issues at stake). The data, the methods and the model are presented in the third section. This sets the stage for the empirical tests (in the fourth section), which are based on the seven major issues of the day in Switzerland. We summarize our main findings in conclusion and discuss their contribution to the debate about the influence of issue preferences on the voter’s decision.

**THE IMPACT OF POLICY PREFERENCES ON ELECTORAL CHOICE**

According to the classical view put forward by the Columbia and Michigan schools, campaigns usually have only a minimal effect in changing the fortunes of a political party. According to them, campaigns rarely change voting choices. However, as Lazarsfeld and his collaborators have already pointed out, it would be naive to assume that ‘effect’ only means a change in vote. For an important number of the citizens, the political communications sent out during the campaign serve to preserve prior decisions about how to vote instead of initiating new decisions. Moreover, a no less significant number of the citizens only shape their voting decision in the course of the campaign. In their case, the campaign activates latent predispositions in a four-step procedure: the political communications issued during the campaign arouse interest; interest brings increased exposure; exposure is increasingly selective as the individual predispositions come into play; eventually, uncertainty disappears and the voting intention crystallizes into a decision. Finally, the campaign may also demobilize citizens or fail to activate them. In addition to conversion, the campaign contributes to reinforcement, crystallization and demobilization of voting intentions. This last effect was not emphasized in the classic study by Lazarsfeld and his collaborators, but it was shown to play an

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6 Lazarsfeld *et al.*, *The People’s Choice*, p. 87.

7 Lazarsfeld *et al.*, *The People’s Choice*, p. 75ff.
important role in a recent direct-democracy campaign in Switzerland and will, therefore, be included in our analytical framework.\(^8\)

Lazarsfeld and his collaborators did not take into account issue-specific voting. The political predispositions they dealt with were of a more structurally determined kind. Innovating in this respect, we argue that issue-specific considerations can contribute to each one of the four processes. The campaign may reinforce the voters’ original vote intention by drawing their attention to their preferred party’s policy positions. Secondly, the campaign may activate the voters’ latent policy preferences and allow them to clarify their voting choice in the light of these preferences. Thirdly, the campaign may induce voters to change their voting choice by pointing out to them that their policy preferences are better represented by another party than by the originally preferred one. Fourthly, by clarifying the policy positions of the various parties, the campaign may create a value conflict for certain voters. They may discover that the party which they traditionally preferred is defending policy positions which they cannot accept. Such a discovery may have a demobilizing effect.\(^9\)

Using this fourfold concept of issue voting, we can now specify our hypotheses regarding the kind of issues that are likely to influence the electoral choice, and the way they become relevant for certain political parties. First of all, we expect that the impact of these four mechanisms depends on the type of issues, which we define as concrete policy propositions. More specifically (Hypothesis 1), we expect them all to be driven by issues which simultaneously

— address the problems with the *highest priority* on the public agenda,
— are *well known* by the public, and
— are *highly polarizing*.

Issues without a high priority on the public agenda are not sufficiently salient to have an impact on the formation of voting choices. Issues that address such priority problems but which have not been intensively debated in the public arena for a certain amount of time are not sufficiently well known by the public to have a substantial impact. Finally, even well-known issues addressing major problems are not likely to have an impact on voting choices if they are not polarizing. Consensual issues do not allow the parties to distinguish themselves from their adversaries during an electoral campaign.

Secondly, not all parties are likely to benefit to the same extent from issue voting. Given that polarizing issues are most likely to give rise to issue voting, we expect parties adopting a *high profile on these issues* to be the most likely to benefit from the mechanisms of reinforcement, crystallization and conversion (Hypothesis 2). Voters who share the issue-specific preferences of these parties and who are already intending to vote for them will be reinforced by their clearly stated positions. By contrast, those intending to vote for those parties that do not position themselves unambiguously on the issue will not get any additional reinforcement in this respect. Moreover, voters who have no clear voting intention at the beginning of the campaign and who share the issue-specific preferences of these parties will receive additional arguments to confirm their voting decisions. By contrast, parties who do not position themselves clearly on these issues do not provide any additional help for the individual voting decisions. Finally, the issue-specific positioning of the parties adopting a high profile during the campaign will attract voters who share the issue-specific predispositions of the party, but who, at the outset of the campaign, had the intention of voting for another party. Conversely, parties without such a high profile risk losing voters for the same reason, but without being able to attract issue-specific converts to themselves. In sum, issue voting is expected to be


\(^9\) The classic study of the American voter (Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes, *The American Voter: An Abridgement* (New York: Werbel and Peck, 1964), pp. 43ff.) shows that attitude conflicts have a delaying effect on the voting decision. However, it does not address the question of whether or not such conflicts induce the voters to abstain from participation at all.
most beneficial for parties taking clearly opposite positions on the polarized issues – as long as these positions are not too far ahead of public opinion. This hypothesis is in line with the general thrust of the directional theory of voting;\(^{10}\) it specifies the mechanisms that may account for its possible validity.

There is, however, \textit{a price attached to taking a high profile on crucial issues} – in terms of both conversion and demobilization. Parties with a high profile not only attract potential voters from other parties, they are also likely to lose voters who originally intended to vote for them, but who do not share their issue-specific preferences (\textit{Hypothesis 3}). Such voters may either turn to another party which is closer in line with their issue-specific preferences or, if there is no viable alternative for them or if the cross-pressures they experience are too important, they may get demobilized and not vote at all. By contrast, parties without a high issue-specific profile are likely to lose voters by issue-specific conversion, but they are not likely to do so as a result of issue-specific demobilization. Their potential voters may be attracted by the issue-specific offer of another party, but they are unlikely to suffer from issue-specific cross-pressures inducing them not to vote at all.

Note that all four mechanisms do not imply a change in individual policy preferences, but \textit{a modification of the relationship between these preferences and the voting choices}. In addition, the campaign may also have an impact on the policy preferences themselves. As Miller and Shanks point out, the explanatory variables – such as those based on policy-related preferences – may themselves be endogenous to the campaign.\(^{11}\) They may have been influenced by the same factors (such as leadership and persuasion) that shaped the voting choices, in addition to having had some separate influence on the vote. During an electoral campaign, the average citizen’s interest in politics increases and she is likely to be exposed to an increasing number of political communications. It is possible that, accordingly, she is not only led to clarify the relationship between her policy preferences and her party choice, but to change her policy preferences in the first place. Changes in policy preferences, in turn, may have an impact on the party choice. Such an impact is again most likely in the case of issues, which are at the same time high on the public priority list, well known to the public and highly polarizing.

In order to reduce this type of ‘simultaneity’ or ‘feedback’ from other causes of the vote, Miller and Shanks shift their explanatory model away from the short-term forces in favour of concentrating on the total effects of variables located further back in the causal chain.\(^{12}\) Thus they add ‘policy-related predispositions’ to the set of explanatory variables, i.e. more generic, policy-related orientations which are the constituents of current policy preferences. Basing their analyses of the ‘new American voter’ on such a strategy, they are impressed by the extent to which the apparent effects of current short-term responses of voters are in fact confounded by long-term factors – in particular by partisan (party identification) and policy-related predispositions (political values). As they point out:

This may not minimize the evidence of consequences of a campaign so much as it recasts the role of the campaign. The selling of a president may still be possible, but the creation of an appealing image would seem to be necessarily based on relatively enduring pre-existing predispositions.\(^{13}\)

We do not contest the conclusion that the short-term forces are rooted in long-term considerations. But our goal here is to control for the predispositions and to pin down the impact of the short-term, issue-related forces. A longitudinal design helps to solve the ‘simultaneity’ problem.


\(^{13}\) Miller and Shanks, \textit{The New American Voter}, p. 506.
Switzerland has a highly fragmented multiparty system: every one of the twenty-six Swiss cantons, which constitute the electoral districts, has a party system of its own, and all these systems are, in turn, quite fragmented internally.14 For analytical purposes, we introduce two simplifications. We reduce (a) the multiplicity of parties to four party ‘families’ and (b) the diversity of the party systems to three types. Our four ‘families’ are:

— the Left
— the Christian Democrats (including the small centre parties)
— the Liberals
— the Conservatives (including the Swiss People’s Party and several minor parties of the radical right).

During the electoral campaign of 1999, the Left and the Conservatives were the two party families with the highest profile on the most pressing issues of the day. The Christian Democrats and the Liberals belong both to the moderate right, which had difficulties in positioning itself in the face of the increasing polarization of the Left and the Conservatives.

Party systems in Switzerland may be divided into three cantonal types:

— that in the Catholic cantons, which is still dominated by the classic religious conflict between Christian Democrats and Liberals
— that in the originally Protestant cantons in the French-speaking region, where class conflict is still important, and the conflict between the Left and the Liberals dominates
— that in the originally Protestant cantons in the German-speaking region, where the two most important traditional conflicts have both been pacified, and where the electoral conflict is now structured by the rise of the Conservatives, especially the Swiss People’s Party, which is mobilizing against all three traditional party families.15

Our study focuses on three cantons – Lucerne, Geneva and Zurich – representing in that order the three cantonal types listed above. In these cantons, we have made a detailed study of the electoral campaign. For the present purpose, it may be sufficient to give a general idea of the intensity and orientation of the cantonal campaigns. We do this on the basis of an analysis of the campaign-related publicity in the major newspapers and magazines of the three cantons during the six months prior to the election.16 Overall, in the period under consideration, the parties spent an estimated amount of roughly SwFr 5 million on publicity in the press published in the three cantons. The bulk of this sum (86 per cent) was spent in the canton of Zurich, which is not only the most populous Swiss canton (with the largest number of seats in the National Council – thirty-four), but also the home of the German-speaking newspapers with the largest circulation. The rest of the publicity was


Table 1 presents the amount of money spent by the four groups of parties in the three cantons. As this table shows, the campaign varied not only in intensity from one canton to the other, but also in terms of its major adversaries. In Zurich, the Conservatives outspent all the other parties; only the Liberals could to some extent keep up with them. This is characteristic of the transformation of the cleavage structure in this most important centre of the country. In Lucerne, by contrast, the traditional conflict between Christian Democrats and Liberals shows up in the spending pattern, as does the Left-Liberal conflict in Geneva. However, in addition to these cantonal differences, it should be noted that there is a tendency for Swiss electoral campaigns to become more ‘national’. Thus, the campaign in Zurich may have had repercussions on the voters in the other German-speaking cantons, and even on the voters in the other language regions.

Most of the issue-specific publicity was spent on the three most pressing problems of the day — refugees, unemployment and Europe.17 The question of the refugees constituted the preferred mobilizing terrain for the Conservatives, who were calling for a tightening of the admissions policy. They spent two-thirds of almost SwFr 500,000 on this issue. The Liberals, spending most of the remaining third, did their best not to be outflanked by the Conservatives on this issue. While they did not spend a comparable amount on the issues generated by the European Union (EU) during the electoral campaign, the Conservatives had continuously campaigned against EU membership throughout the 1990s. In addition to the refugee issue, the question of European integration had been the major campaign theme of the Conservatives for years. This is to say, they ‘owned’ two of the three major issues of the day. Unemployment, by contrast, was clearly an issue dominated by the Left.

We should also keep in mind one important additional element, which is not directly related to the electoral campaign and, therefore, does not appear in our study of newspaper advertisements, but which is likely to have had an impact on the issue-related considerations of the citizens. As the electoral campaign got slowly under way in mid-June, the Swiss had to vote on five issues on the federal level: two had to do with the problem of refugees, the other three were social policy issues — the introduction of a maternity insurance scheme being the most important one. All five proposals concerned measures which had been adopted by the Federal Assembly, but had been attacked in a referendum. This vote provided the Conservatives with yet another opportunity to exploit the issue of the refugees in their favour. The introduction of the maternity insurance scheme brought the Left into conflict with the Conservatives and the Christian Democrats, with the Liberals being split between linguistic regions — the French-speaking Liberals supported the proposal and the German-speaking Liberals opposed it.

17 Only a quarter of the amount of money spent on newspaper advertising was attributed to the five most pressing problems. Most advertisement did not comprise any reference to political issues, but focused on slogans and publicity for the parties and candidates themselves. The most pressing problems were determined by the responses to an open question posed at the outset of our study in June 1999, four months before the elections. Refugees/foreigners were mentioned by 34.1 per cent of the respondents, unemployment by 16.4 per cent, and Europe by 8.4 per cent, followed by the public deficit (mentioned by 4.7 per cent) and old-age pensions (mentioned by 4.0 per cent).
DATA, METHODS AND THE MODEL

Data

We analyse the data of a three-wave panel from the Swiss national election study, 1999. The data include three representative samples from the cantons of Zurich, Lucerne and Geneva. These samples were interviewed at the beginning of the campaign in June (1–22 June), at the height of the campaign in September (6–30 September) and immediately after the elections (25 October to 17 November). The first-wave samples included roughly 850 respondents per canton. Approximately 600 respondents per canton or 1,860 persons altogether completed all three waves. The sample consisting of those who answered all three waves is not representative of the Swiss citizens in one important respect: the active voters are strongly overrepresented. Thus, the participation rate in the federal elections of this group reaches 76.4 per cent, compared to an average of only about 45 per cent of the citizens who participated in our three cantons (45.3 per cent in Zurich, 52.9 per cent in Lucerne and 36.3 per cent in Geneva). This overrepresentation of active citizens is partly a panel effect – active citizens are more ready to participate repeatedly in a study on politics; partly it is attributable to the general selectivity of surveys about political issues in Switzerland.18

Dependent Variable

Our dependent variable is voting choice for the National Council, 1999.19 This is a categorical variable with five categories. In addition to the four party families already introduced, we also distinguish the group of non-voters, which is crucial for the mechanisms of crystallization and demobilization. Taking into account the flows between the five categories during the course of the campaign, that is, between the first and third wave of the panel, we arrive at the following estimates of the various groups interesting us with regard to the campaign effects:

—45.4 per cent of the sample stuck to their original vote intention (reinforcement),
—21.4 per cent formed a voting choice and voted (crystallization),
—6.8 per cent voted for another party than originally intended (conversion),
—7.9 per cent originally had a preference, but did not vote (demobilization).

The remaining 18.5 per cent did not have a preference all along. Given our overestimation of the final participation rate, this last group is certainly to be much more important in the population at large. Table 2 gives us an idea of the general flow of voters during the campaign. Note that this flow is not only attributable to issue-specific considerations. It appears that all parties succeeded in reinforcing the bulk of the original vote intentions: the Left most successfully with 82.7 per cent of stable intentions, the Christian Democrats least successfully with 69.4 per cent of stable intentions. Comparing cantons, it appears that the Christian Democrats and the Conservatives had great difficulties in reinforcing vote intentions in the canton of Geneva, where they could only retain 50.0 per cent and 36.4 per cent respectively of their original intended voters.20 All parties suffered about equally from demobilization. All parties also benefited from crystallization, but the Christian Democrats did less so than the other three competitors. In addition, there are again some contextual

18 The post-electoral survey of a representative sample held immediately after the federal elections in 1999 indicated a participation rate of 61.8 per cent.
19 At federal elections, both chambers of the Swiss Parliament are completely renewed. We are dealing here only with the elections for the National Council – the lower chamber, where each canton has a number of representatives proportional to the size of its electorate and whose members are elected by proportional vote. We do not consider here the elections for the Council of States, which has two representatives for each canton who are elected by a majoritarian vote.
20 In the case of the Conservatives, the lack of success in Geneva may be attributed to the difficulties the party ran into once it became known that one of its top candidates in the canton was in fact a member of the extreme right. There may also be a more technical argument: since the Conservative camp was very small at the outset of the survey in Geneva, it was more sensitive to individual defections than those in the other two cantons.
TABLE 2  
**Voting Choice by Vote Intention at t₁**

<table>
<thead>
<tr>
<th>Vote</th>
<th>Voting intention at t₁</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Left (%)</td>
</tr>
<tr>
<td>Left</td>
<td>82.7</td>
</tr>
<tr>
<td>Christian Democrats</td>
<td>19.1</td>
</tr>
<tr>
<td>Liberals</td>
<td>1.7</td>
</tr>
<tr>
<td>Conservative right</td>
<td>2.2</td>
</tr>
<tr>
<td>No intention/no vote</td>
<td>11.4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Variations: while the Conservatives benefited most from crystallization in the two German-speaking cantons, the Left did so in Geneva. Finally, as far as conversion is concerned, the flows did not favour one party unilaterally over the others, except for the loss of the Christian Democrats to the Conservatives, in the German-speaking cantons in particular.

**Issue-Specific Variables**

As Miller and Shanks have argued, one should make a clear distinction between generally pressing ‘problems’ and conflicts over policy direction, i.e. political issues. Indeed, several problems (such as unemployment) can be seen in terms of general concerns about the current state of affairs in the nation without any explicit connection to controversies about a national policy. Thus, the above-mentioned list of the most pressing problems neither informs us about the specific policies that one could implement to solve these problems, nor about the related policy preferences of the main political camps. Moreover, we need two sets of indicators for the policy preferences or issue orientations: one set for the individuals’ issue positions at the outset of the campaign (in June), and one for the changes in their issue positions during the course of the campaign.

**Issue positions.** In the context of the directional and proximity theories of voting, issue positions are operationalized as distances from the voter’s position to the parties’ positions on the issues. There are two ways to calculate these distances: either by taking the voter’s own perception of the parties’ positions, or by taking the average party placements of the entire aggregate of voters. In favour of taking the voter’s own perceptions, it has been stated that although ‘voters may at times be mistaken about these locations, it is their personal beliefs whether right or wrong, that will guide preference formation. The best source for both types of information is therefore the individual voter’. This way to proceed, however, is likely to give rise to the ‘simultaneity’ or ‘feedback’ effects Miller and Shanks were worried about. The presence of projection effects constitutes a problem: voters tend to place parties that they prefer closer to their own issue positions than parties that they reject. This means that the measurement of the individual voter’s perception of a party’s position on an issue is not independent of her own position on the issue. This problem is solved, if we use the parties’ placements by the aggregate of voters. But then we run into the problem that the voters tend to be badly informed and probably do not know where the parties are typically (by the aggregate of voters) located on the different issues. These considerations lead us to abandon issue proximities and to use voters’ current policy preferences for the issue positions.

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We have selected seven issues representing the five most pressing problems – refugees, Europe, unemployment, public deficit and old age pension, plus the maternity insurance scheme. For the problem of the refugees, the issue chosen concerns the tightening of the admission criteria for refugees – the concrete policy which was submitted to the voters in mid-June. With respect to Europe, both the bilateral treaty and the issue of Swiss membership of the EU were included. For the public deficit, the selected policy statement called for a rapid elimination of the deficit of the federal government, an issue which has been pursued by the parties of the right for some time and which has given rise to a protracted public debate and some tough negotiation between the major parties in the year preceding the elections. For unemployment and old age pensions, the available policy options were less visible to the public at the time. We formulated issues which have the advantage of being specific, but which do not constitute the only corresponding policy options: for unemployment, the policy selected proposed a ‘general reduction in working hours as a means of reducing unemployment’, a proposal favoured by the Left following the contemporary French example. For the old age pensions, the proposition submitted asked for an increase in value-added tax (VAT) in order to guarantee the financial health of the old age pension scheme. This last proposition is not clearly attributable to any camp, but finds supporters and adversaries both on the left and the right.

The coding used for the responses is:

1 ‘strongly disagree’
2 ‘mildly disagree’
3 ‘no opinion’
4 ‘mildly agree’
5 ‘strongly agree’.

For this study, we shall use the issue preferences in June, i.e. before the election campaign had really got off the ground. This means that these preferences cannot have been influenced by the subsequent campaign, which allows us to control for the ‘simultaneity’ problem raised by Miller and Shanks.

Table 3 presents the distributions of the sample’s preferences with respect to the seven issues at the outset of the study. Large majorities were in favour of tightening the admission criteria for refugees, in favour of the bilateral treaties and of deficit reduction. Majorities also supported EU membership and the reduction of the working week. The maternity insurance scheme, which was rejected by the Swiss voters in June, would just have been accepted by the sample. Two reasons may account for this difference between our survey and the popular vote. First, remember that our sample is not representative of Swiss voters in general, not only because active voters are overrepresented, but also because it was drawn in three cantons only. Secondly, following the reasoning of some politicians on the right, a considerable number of voters may have voted against the proposed version of the insurance scheme, although they were not against the principle of introducing such a scheme.
Change of position with regard to an issue. While support for each one of the seven issues remained rather stable on the aggregate level throughout the three waves of the study, there was a lot of change on the individual level. As is shown by Table 4, roughly a quarter to more than two-fifths of the respondents changed sides (including ‘half-way’ changes between one camp and an undecided ‘no opinion’ position between the camps) at least once with regard to these issues.

For each and every issue, the share of those who have changed sides twice is about half as large as the share of the respondents who changed just once. This is exactly what we would have expected, if all the changes of side were due to chance alone – the result of non-attitudes, as suggested by Converse’s ‘black-and-white’ model. While we have reason to assume that not all preference change is simply indicative of such ‘non-attitudes’, we can still be pretty sure that this is, indeed, the case for those who changed sides twice during the study. This means that we take into account changes of sides by respondents who have changed sides only once. Since it is not unlikely that some of the respondents with non-attitudes have changed sides only once, this is only a partial solution to the problem. Changes are coded with a direction, i.e. for each issue, there will be two dummy variables for change, one for change in favour and one for change against the proposition.

Other Independent Variables

In addition to the issue characteristics, we also include an indicator for the vote intention at $t_1$. The vote intention is coded in exactly the same way as the dependent variable, with the Conservatives as the base category. Holding the vote intention at $t_1$ constant allows us to obtain the effects of the issue-specific variables during the last four months before the vote. Note that these short-term effects will not include all issue-related effects, nor will they include all campaign-related issue-specific effects: the voting intentions at $t_1$ have already been influenced by the issue preferences the voters held at that time. These preferences, in turn, may already have been shaped by preceding electoral campaigns at lower levels of the Swiss federal system or by early campaigning for the federal elections in 1999. Thus, since the beginning of the 1990s, the Conservatives in particular have been attempting to win voters over the long term by conducting a quasi-permanent campaign.

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26 This also includes two ‘half-way’ changes, i.e. a change from one side to the ‘no opinion’ position and from there to the other side.

27 This implies that our financial indicators for the intensity of the campaign considerably underestimate the already impressive dominance of the Conservative right in this campaign. The publicity campaign of the Swiss
Finally, we also include a set of socio-demographic variables: the usual suspects – age, gender, education, religion, class – and an indicator for the canton, i.e. an all-purpose indicator for the cantonal specificities. While the coding of age, gender and education are straightforward, we would like to spell out our coding of religion and class. With regard to religion, we distinguish between practising Catholics, non-practising Catholics and the remainder of the population (base category). It is well known that the Swiss Christian Democratic party draws mainly on the Catholic population.\textsuperscript{28} As for class, we use a six-fold categorization of the household’s class position that distinguishes between the self-employed (base category), three categories within the new middle class (managers, technocrats and socio-cultural professionals), and two categories within the working class (skilled and unskilled workers).\textsuperscript{29}

The Model

We use multinomial logit regression to analyse the five-category voting choice.\textsuperscript{30} The multinomial logit model can be thought of as simultaneously estimating binary logits for all possible comparisons among the dependent voting choices. More recently, this type of model has been criticized for its imposition of the IIA (Independence of Irrelevant Alternatives) property on the voters.\textsuperscript{31} The validity of this hypothesis can be tested, however, using a Hausman’s specification test.\textsuperscript{32} We have performed such a test and have found no violation of this assumption. Equation 1 summarizes our multinomial regression model, where $y_{ij}$ is the logit, i.e. the natural logarithm of the ratio of the expected probability that respondent $i$ will vote for party $j$ and the expected probability that she will vote for the reference category. In our case, $j$ ranges from 1 to 4 ($1 = \text{Left}, 2 = \text{Christian Democrat}, 3 = \text{Liberal}, 4 = \text{non-voter}$), with the Conservatives as the reference category:\textsuperscript{33}

$$y_{ij} = \alpha_j + \sum_k \beta_{kj} X_{ik} + \sum_l \beta_{lj} X_{il} + \sum_m \beta_{mj} X_{im} + \sum_n \beta_{nj} X_{in}$$

(1)

In this model, the $\beta_{kj}$ are the coefficients for the effects of the $k = 7$ issues, and the $X_{ik}$ are the issue preferences of respondent $i$. The $\beta_{lj}$ are the coefficients for the effects of the $l = 14$ possible directed preference changes with respect to the seven issues and the $X_{il}$ are the fourteen dummy variables indicating the pattern of changes of respondent $i$. The $\beta_{mj}$ are the coefficients for the effects of the respondent’s vote intentions at $t_1$ and the $X_{im}$ are dummy variables for the $m = 5 - 1$ available choices; the Conservatives serve again as reference category. Finally, the $\beta_{nj}$ are the coefficients for the effects of the social-demographic and cantonal sources of voting choice, and the $X_{in}$ are the corresponding $n$ independent variables.

\textsuperscript{(F’note continued)}

People’s Party has grown out of all proportions and has set new standards in Switzerland. It is essentially financed by two of the party’s leaders in Zurich, both very rich businessmen (see Kurt Müller, ‘Schleichende Abwertung der Parteien, NZZ’, Internationale Ausgabe, No. 230, 3 October 1999, p. 27).

\textsuperscript{28} E.g. Linder, ‘Parteien-, Persönlichkeits-, Europa- oder Traditionswahl?’ p. 143.


\textsuperscript{33} Technically, the parameter coefficients for the reference category can be obtained by re-running the model using another party as reference category (Long, Regression Models for Categorical and Limited Dependent Variables, p. 160).
RESULTS

Overall Short-Term Effects of Issue Preferences on the Vote

Table 5 presents the results of likelihood ratio tests which indicate whether the independent variables have any effect at all on the voting choice.\(^{34}\) The results show that, controlling for vote intentions at \(t_1\) and the usual socio-demographic characteristics, four of the seven issue preferences have a highly significant short-term impact on voting choices; one has a more limited, but still significant, impact. The largest impact is exerted by the issues of refugees and EU membership. This result is in line with our first hypothesis. Indeed, both the refugee and the EU membership issues fulfil all three criteria for having an impact: they address problems of the highest priority, are very well known to the public and highly polarizing – between the Conservatives, on the one hand, and the Left, on the other hand. Interestingly enough, the issue of the bilateral treaty does not have a significant impact, although it concerns the same problem area as EU membership. As Table 3 has shown, at

<table>
<thead>
<tr>
<th>Effect</th>
<th>(-2) Log likelihood of reduced model</th>
<th>(\chi^2) (^{*})</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2,545.715</td>
<td>0.000</td>
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<tr>
<td>Issue positions at (t_1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work time reduction (t_1)</td>
<td>2,567.308</td>
<td>21.593</td>
<td>4</td>
<td>0.000</td>
</tr>
<tr>
<td>Pension (t_1)</td>
<td>2,557.689</td>
<td>11.973</td>
<td>4</td>
<td>0.018</td>
</tr>
<tr>
<td>Refugees (t_1)</td>
<td>2,577.230</td>
<td>31.514</td>
<td>4</td>
<td>0.000</td>
</tr>
<tr>
<td>EU membership (t_1)</td>
<td>2,587.334</td>
<td>41.619</td>
<td>4</td>
<td>0.000</td>
</tr>
<tr>
<td>Bilateral treaty (t_1)</td>
<td>2,548.991</td>
<td>3.276</td>
<td>4</td>
<td>0.513</td>
</tr>
<tr>
<td>Budget deficit (t_1)</td>
<td>2,551.080</td>
<td>5.365</td>
<td>4</td>
<td>0.252</td>
</tr>
<tr>
<td>Maternity insurance (t_1)</td>
<td>2,567.801</td>
<td>22.086</td>
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<tr>
<td>Change of issue positions</td>
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<tr>
<td>Work time reduction</td>
<td>2,548.903</td>
<td>3.188</td>
<td>8</td>
<td>0.922</td>
</tr>
<tr>
<td>Pension</td>
<td>2,555.411</td>
<td>9.696</td>
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<td>0.287</td>
</tr>
<tr>
<td>Refugees</td>
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<td>10.779</td>
<td>8</td>
<td>0.215</td>
</tr>
<tr>
<td>EU membership</td>
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<td>22.005</td>
<td>8</td>
<td>0.005</td>
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<tr>
<td>Bilateral treaty</td>
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<td>Budget deficit</td>
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<td>8.334</td>
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<td>Maternity insurance</td>
<td>2,559.296</td>
<td>13.580</td>
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<tr>
<td>Vote intention</td>
<td>3,330.877</td>
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<td>0.000</td>
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<td>Socio-demographics</td>
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<td></td>
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<tr>
<td>Age</td>
<td>2,623.628</td>
<td>77.913</td>
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<td>0.000</td>
</tr>
<tr>
<td>Education</td>
<td>2,548.367</td>
<td>2.652</td>
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<td>0.618</td>
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<tr>
<td>Canton</td>
<td>2,581.925</td>
<td>36.209</td>
<td>8</td>
<td>0.000</td>
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<tr>
<td>Religion</td>
<td>2,593.521</td>
<td>47.805</td>
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</tr>
<tr>
<td>Gender</td>
<td>2,551.823</td>
<td>6.108</td>
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<td>0.191</td>
</tr>
<tr>
<td>Class</td>
<td>2,590.187</td>
<td>44.471</td>
<td>20</td>
<td>0.001</td>
</tr>
</tbody>
</table>

\(^*\)The chi-square statistic is the difference in \(-2\) log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

\(^{34}\) For these tests, one first estimates the full model that contains all of the variables, with the resulting likelihood ratio statistic. Then, one estimates the restricted model formed by excluding the variable whose impact is to be tested, with the resulting likelihood ratio statistic. Finally, one computes the difference between the two statistics, which is distributed as chi-square with \(J - 1\) degrees of freedom, where \(J\) corresponds to the number of dependent categories (see Long, Regression Models for Categorical and Limited Dependent Variables, p. 161).
the time of the June interviews, this issue was both more consensual and less well known (a high proportion of ‘no opinions’) than the issue of EU membership. The two other issues with a highly significant impact are the reduction of working time and the maternity insurance scheme. The first one concerns the high priority problem of unemployment, but has been somewhat less debated than the two leading issues; the second one, though it does not touch upon one of the most important problems on the long-term public agenda, for reasons of the voting calendar, has been high on the short-term agenda, intensely debated during the referendum campaign in the spring of 1999, and highly polarizing between the left and the right. The remaining two issues – the use of the VAT tax to guarantee old age pensions, and the reduction of the federal deficit – are both highly polarizing, too, but they were relatively new on the public agenda and they are relatively technical, which may explain why their effect on the campaign was relatively small or insignificant. In the remainder of this Note, we therefore test Hypotheses 2 and 3 on the four most discriminating issues.

Changes of issue preferences during the campaign have a lower impact than the overall issue preferences. This impact only turns out to be significant for the two European issues. This is an important result, because it confirms the notion that electoral campaigns are not so much shaping policy preferences, but linking established preferences to political parties.

Table 5 also shows that, with the exception of education and gender, all the usual suspects among the socio-demographic characteristics have had an impact on the vote, independently of their impact on issue preferences and change. Finally, note the overriding impact of the vote intention at \( t_1 \) on the voting choice.

**Detailed Short-Term Effects of Issue Preferences on the Vote: The Four Mechanisms**

Table 6 presents the logistic regression coefficients for the four contrasts: Left versus Conservatives, Christian Democrats versus Conservatives, Liberals versus Conservatives, and ‘non-voters’ versus Conservatives. The various parameters give an overall idea of the impact of each issue preference on the vote for a given party as opposed to the vote for the Conservatives. Thus, in the first column, we note that people who favour the reduction in working time, who are against a tight admissions policy for refugees, who support Swiss membership of the EU and who favour the introduction of a maternity insurance scheme are very significantly more likely to have voted for the Left than for the Conservatives. We note that five of the fourteen possible changes of issue preferences have a significant impact on the vote for the Left vs. Conservatives, and we observe the very strong impact of the original vote intention: unsurprisingly, people intending to vote for the Left at \( t_1 \) are much more likely to have eventually voted for the Left than people who intended to vote for the Conservatives. More interestingly, the same also holds for the other three vote intentions. Table 6 also shows, as expected, that all Catholics, but especially the practising ones, are much more likely than the other voters (Protestants, no religion) to have chosen the Christian Democrats than the Conservatives, that the Christian Democrats have been much more frequently chosen in Lucerne than in Zurich or Geneva, that the Liberals suffered most from the Conservative competition in Zurich, and that women and younger persons participated rather rarely, while managers, technocrats, skilled workers and practising Catholics did so rather frequently.

The coefficients in Table 6, however, do not tell us much with respect to the impact of our four mechanisms. The most direct approach for the interpretation in terms of the four mechanisms is to examine the predicted probabilities of voting choices for different values of the independent variables. More specifically, we propose to examine these probabilities for different values of the issue preferences and voting intentions, given a ‘standard’ combination of socio-demographic characteristics (a self-employed, non-Catholic man of average age and education in the canton of Zurich). We examine one issue at a time, fixing the values for the issues not under

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35 Long, *Regression Models for Categorical and Limited Dependent Variables*, p. 64.
<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Left vs. Conservatives</th>
<th>Christ.-dem. vs. Conservatives</th>
<th>Liberal vs. Conservatives</th>
<th>Non-voters vs. Conservatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef. (s.e.)</td>
<td>Coef. (s.e.)</td>
<td>Coef. (s.e.)</td>
<td>Coef. (s.e.)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-5.441*** 1.475</td>
<td>-4.090** 1.326</td>
<td>-4.091*** 1.267</td>
<td>-0.172*** 1.089</td>
</tr>
<tr>
<td><strong>Issues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work time reduction t1</td>
<td>0.430*** 0.115</td>
<td>0.213* 0.109</td>
<td>0.054 0.101</td>
<td>0.288 0.091</td>
</tr>
<tr>
<td>Pension t1</td>
<td>0.071 0.121</td>
<td>0.045 0.122</td>
<td>0.078 0.110</td>
<td>-0.193 0.104</td>
</tr>
<tr>
<td>Refugees t1</td>
<td>-0.673*** 0.151</td>
<td>-0.326* 0.159</td>
<td>-0.211 0.154</td>
<td>-0.238 0.141</td>
</tr>
<tr>
<td>EU membership t1</td>
<td>0.422*** 0.116</td>
<td>0.445*** 0.113</td>
<td>0.578*** 0.102</td>
<td>0.485*** 0.092</td>
</tr>
<tr>
<td>Bilateral treaty t1</td>
<td>0.203 0.174</td>
<td>0.177 0.156</td>
<td>0.242 0.152</td>
<td>0.106 0.127</td>
</tr>
<tr>
<td>Budget deficit t1</td>
<td>-0.203 0.138</td>
<td>-0.264(*) 0.140</td>
<td>-0.037 0.131</td>
<td>-0.080 0.116</td>
</tr>
<tr>
<td>Maternity insurance t1</td>
<td>0.487*** 0.113</td>
<td>0.327*** 0.110</td>
<td>0.159 0.102</td>
<td>0.234*** 0.090</td>
</tr>
<tr>
<td><strong>Issue change</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Work time: against</td>
<td>-0.180 0.385</td>
<td>-0.171 0.386</td>
<td>-0.329 0.388</td>
<td>-0.219 0.314</td>
</tr>
<tr>
<td>Work time: for</td>
<td>0.279 0.533</td>
<td>-0.155 0.513</td>
<td>0.337 0.436</td>
<td>0.434 0.406</td>
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<tr>
<td>Pension: against</td>
<td>0.807* 0.416</td>
<td>0.122 0.432</td>
<td>0.420 0.392</td>
<td>0.672 0.369</td>
</tr>
<tr>
<td>Pension: for</td>
<td>0.040 0.396</td>
<td>-0.181 0.396</td>
<td>0.042 0.374</td>
<td>-0.443 0.332</td>
</tr>
<tr>
<td>Refugees: against</td>
<td>1.221* 0.580</td>
<td>1.198* 0.540</td>
<td>0.614 0.539</td>
<td>1.030 0.492</td>
</tr>
<tr>
<td>Refugees: for</td>
<td>-0.863 0.544</td>
<td>-0.534 0.591</td>
<td>-0.712 0.558</td>
<td>-0.439 0.513</td>
</tr>
<tr>
<td>EU member: against</td>
<td>-0.953 0.585</td>
<td>-0.017 0.462</td>
<td>-0.733 0.451</td>
<td>-0.617 0.391</td>
</tr>
<tr>
<td>EU member: for</td>
<td>1.258** 0.466</td>
<td>1.458*** 0.422</td>
<td>0.945* 0.420</td>
<td>1.122*** 0.367</td>
</tr>
<tr>
<td>Bilateral treaty: against</td>
<td>-0.255 0.530</td>
<td>0.222 0.427</td>
<td>-0.712 0.469</td>
<td>0.234 0.333</td>
</tr>
<tr>
<td>Bilateral treaty: for</td>
<td>0.960* 0.482</td>
<td>0.868* 0.457</td>
<td>0.729 0.451</td>
<td>1.154*** 0.366</td>
</tr>
<tr>
<td>Deficit: against</td>
<td>0.190 0.360</td>
<td>-0.338 0.379</td>
<td>0.330 0.355</td>
<td>0.217 0.304</td>
</tr>
<tr>
<td>Deficit: for</td>
<td>-0.535 0.457</td>
<td>-0.277 0.439</td>
<td>0.340 0.417</td>
<td>-0.102 0.374</td>
</tr>
<tr>
<td>Maternity ins: against</td>
<td>-1.268** 0.489</td>
<td>-0.219 0.447</td>
<td>-0.179 0.421</td>
<td>-0.078 0.376</td>
</tr>
<tr>
<td>Maternity ins: for</td>
<td>0.403 0.493</td>
<td>-0.218 0.448</td>
<td>-0.050 0.453</td>
<td>0.357 0.376</td>
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<tr>
<td>Voting intention</td>
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<td>---------------------------------</td>
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<td>Left</td>
<td>5.390***</td>
<td>0.817</td>
<td>1.504*</td>
<td>0.688</td>
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<td>Christian Dem (pdc)</td>
<td>2.304**</td>
<td>0.868</td>
<td>4.183***</td>
<td>0.487</td>
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<td>Liberals (prd-pls)</td>
<td>2.740**</td>
<td>0.867</td>
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<td>No intention</td>
<td>3.175***</td>
<td>0.750</td>
<td>2.220***</td>
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</table>

<table>
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<tr>
<th>Socio-demographics</th>
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<td>Age</td>
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<td>0.009</td>
<td>0.008</td>
<td>0.009</td>
<td>0.003</td>
<td>0.008</td>
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<td>Education</td>
<td>0.068</td>
<td>0.085</td>
<td>0.082</td>
<td>0.089</td>
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<tr>
<td>Cath. practising</td>
<td>−0.254</td>
<td>0.418</td>
<td>1.480***</td>
<td>0.368</td>
<td>0.246</td>
<td>0.365</td>
<td>−0.700*</td>
<td>0.346</td>
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<tr>
<td>Cath. not practising</td>
<td>−0.188</td>
<td>0.335</td>
<td>0.914**</td>
<td>0.345</td>
<td>0.278</td>
<td>0.302</td>
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<tr>
<td>Gender (women)</td>
<td>−0.165</td>
<td>0.271</td>
<td>−0.183</td>
<td>0.272</td>
<td>−0.034</td>
<td>0.251</td>
<td>−0.459*</td>
<td>0.225</td>
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<tr>
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<td>Managers</td>
<td>0.135</td>
<td>0.469</td>
<td>−0.411</td>
<td>0.446</td>
<td>−0.465</td>
<td>0.399</td>
<td>−1.505***</td>
<td>0.399</td>
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<td>Technocrats</td>
<td>−0.107</td>
<td>0.449</td>
<td>−1.017*</td>
<td>0.419</td>
<td>−0.588</td>
<td>0.387</td>
<td>−0.873*</td>
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<td>0.663</td>
<td>−0.529</td>
<td>0.651</td>
<td>−0.688</td>
<td>0.574</td>
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<tr>
<td>Skilled workers</td>
<td>−0.440</td>
<td>0.463</td>
<td>−0.761</td>
<td>0.417</td>
<td>−0.911*</td>
<td>0.404</td>
<td>−0.998**</td>
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<tr>
<td>Unskilled workers</td>
<td>0.560</td>
<td>0.632</td>
<td>−0.784</td>
<td>0.609</td>
<td>−0.881</td>
<td>0.608</td>
<td>−0.046</td>
<td>0.506</td>
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<tr>
<td>Region (canton)</td>
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<td>Zurich</td>
<td>−0.276</td>
<td>0.351</td>
<td>−1.099***</td>
<td>0.342</td>
<td>−1.145***</td>
<td>0.318</td>
<td>−0.314</td>
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</tr>
<tr>
<td>Geneva</td>
<td>0.444</td>
<td>0.413</td>
<td>−0.860*</td>
<td>0.422</td>
<td>0.107</td>
<td>0.375</td>
<td>0.447</td>
<td>0.352</td>
</tr>
</tbody>
</table>

***p ≤ 0.001, **p ≤ 0.01, *p ≤ 0.05.
consideration at their mean and, for the time being, assuming no change of issue preferences during
the campaign.

Given these assumptions, Figure 1 presents the predicted reinforcement effects, i.e. the
probabilities that the voting choice equals the vote intention at $t_1$, as a function of the preferences
on the four issues which have been shown to be most significant for the voting choices. In line with
our theoretical expectation (Hypothesis 2), the reinforcement effects are generally most pronounced
for the party families at the two opposite poles of the political spectrum. Looking at the refugee issue
first, we note that, for persons with Left voting intentions at $t_1$, the probability of choosing the Left
increases from 0.41 to 0.83 as we pass from strong supporters of a tough admissions’ policy (1) to
strong opponents of such a policy (5). Conversely, the probability of choosing the Conservatives
decreases from 0.75 to 0.50 as we pass from strong supporters to strong opponents of such a policy.
In other words, the refugee issue has a very strong reinforcement effect for the Left and a substantial
reinforcement effect for the Conservative right. By contrast, the other two party families and the
non-voters are much less affected by this issue. An analogous pattern emerges for the maternity
insurance scheme: Left supporters of the maternity insurance scheme and Conservative opponents
of such an insurance scheme are reinforced during the campaign. The only difference here is that
Christian Democratic voters are also to some extent reinforced in their vote intentions, if they support
this issue. We also find a similar pattern for the reduction of working time. Here, the difference lies
with the Liberal voters, whose vote intentions are also reinforced by opposition to such a reduction.
The only issue which does not follow the expected pattern is EU membership. This issue has a very
strong reinforcing effect for Conservative vote intention. Thus, the probability of voting as intended
changes from 0.31 to 0.76 as we move from supporters to opponents of EU membership in the
Conservative camp. In this case, there is no reinforcement effect for the Left, however. Whether
they are in favour or against Switzerland’s joining the EU, persons who intended to vote for the
Left eventually do so with about the same probability. This last result contradicts our expectation
that the Left’s clear position in favour of EU membership should have had a reinforcing effect on
its voters.

Conversion and demobilization are inversely related to reinforcement. The persons whose
original voting intention is not reinforced either change to another party or they demobilize. In our
case, there are three options for change for each original voting preference. We illustrate the effects
on conversion and demobilization for the two most important issues of the electoral campaign,
namely the refugees and EU membership.

Figure 2 presents the case of the refugee policy. Take the Left first. Left supporters of a tough
admissions’ policy for refugees are rather likely to end up not voting at all: as we move
from opposition (5) to support for such a policy (1), the probability of demobilization on the
Left increases from 0.11 to 0.31. In other words, the value conflict experienced by Left-leaning
voters who support a tough stance with respect to refugees has, as we have expected, a
strong demobilizing effect. But this is not the only effect. In many cases, the value conflict
has apparently induced Left-leaning voters to join the other side: thus, the probability of converting
to the Conservatives also increases from 0.03 to 0.22, as we move towards support of a tougher
stance with regard to refugees. The Christian Democrat or Liberal parties, however, did not
constitute an option for voters originally intending to vote for the Left, but dissenting on its
immigration policy. The Left, in other words, had a heavy price to pay for its clear positioning on
this issue.

For the Conservatives, we find a similar strong demobilization effect (increasing from 0.19 to
0.33 as we move towards a more liberal policy with respect to refugees), but there is no analogous
tendency to join the other side in their case. The two intermediary families, as expected, did not
experience such demobilizing effects, but both of them lost voters to the two poles as a result of
conversions based on the refugees’ policy. In both cases, losses to the Conservatives were more
likely (0.24 and 0.15 for strong supporters of a tougher policy among Christian Democrats and
Liberals respectively) than losses to the Left (0.10 and 0.12 for strong opponents of a tougher policy
in the two families).
Figure 3 presents demobilization and conversion effects for the issue of **EU membership**. The pattern here is similar to the previous one, but somewhat more favourable for the Left. All three competitors lost converts to the Conservatives on the issue of EU membership. The respective probabilities of defecting to the Conservatives as a function of opposition to EU membership increases up to 0.22 for Christian Democrats, 0.18 for the Liberals and 0.13 for the Left. By contrast,
Fig. 2. Predicted conversion and demobilization effects for refugee-related preferences on voting choice in National Council elections, 1999: probability of voting for other parties or not voting at all, for people with a given voting intention at $t_1$. 
only the Liberals were capable of making some restricted gains from the Conservatives among the supporters of EU membership. However, it was costly for the Conservatives in terms of demobilization: persons originally intending to vote for the Conservatives, but in favour of EU membership, demobilized massively: in their group, demobilization reached up to 47 per cent! The Left, by contrast, did not suffer from such an effect on this issue.

**Fig. 3.** Predicted conversion and demobilization effects of EU-related preferences on voting choice in National Council elections, 1999: probability of voting for other parties or not voting at all, for people with a given voting intention at $t_1$
Summarizing the impact of the combined effects of reinforcement, conversion and demobilization, our Hypotheses 2 and 3 are largely confirmed:

—The party families with the highest profile on the crucial issues benefited from their extreme positions. The Conservatives were most successful at making converts from all quarters. The Left only gained some votes from the intermediary parties on the refugee question. In line with Hypothesis 3, the Conservatives paid in terms of demobilization, especially with respect to EU membership. Note, however, that they did not lose voters due to conversion. The Left lost heavily due to conversion and demobilization on the refugee issue, and modestly due to conversion with respect to EU membership. This asymmetric combination of conversion and demobilization with respect to the key issues of the campaign helps to explain the eventual victory of the Conservatives.

—By contrast, the intermediary parties turn out to have lost voters due to conversion on both of the most important issues – to the two poles with respect to the refugee issue, to the Conservatives only with respect to the issue of EU membership. In turn, the Liberals made only small issue-specific gains (on the EU issue), the Christian Democrats did not make any at all. Yet, but again as expected (Hypothesis 3), issue-related demobilization did not seem to have affected these parties at all.

This brings us to the fourth mechanism: as we have already seen, no less than a fifth of our sample formed a voting choice only in the course of the short-term campaign. The choices of this very important group were also heavily influenced by the decisive issues, as can be seen from Figure 4. Supporting again our Hypothesis 2, this figure shows that the two poles benefited from crystallization related to the four most discriminating issues, while the two intermediary families were hardly affected by issue-related crystallization processes at all. The Conservatives again had an advantage over the Left, since they gained from their pronounced stance on all four issues, while the Left gained on only three of them. Its support of EU membership did not help the Left with crystallization. To get an idea of the magnitude of this impact, note that the probability that an average crystallizer chose the Left increased from 0.05 to 0.27 as we move from a preference for tightening the refugee policy to a preference for its liberalization. Conversely, an average crystallizer’s probability of voting for the Conservatives increased from 0.09 to 0.26 as we move in the opposite direction. While these probabilities give the impression of more or less symmetrical effects, we should not forget the uneven distribution of the citizens with regard to this issue: two-thirds of them favoured a tightening of the refugee policy in June (see Table 3). This again means that the Conservatives benefited considerably more than the Left from the crystallization effect on this issue. The order of magnitude of the impact is similar for the other issues.

The overall picture that emerges from the discussion of the four mechanisms is now quite clear: except for a demobilization effect, issue voting contributed to the victory of the Conservatives. The Left was hurt by demobilization and conversion to the Conservatives, but it gained from crystallizers. The two intermediary party families were hurt by conversions to the Conservatives and to some minor extent to the Left, and they benefited neither from issue-related conversion nor from crystallization. For those who followed the Swiss federal election campaign, this does not come as much of a surprise after all. Both the Left and the Conservatives had clear messages with regard to the key issues of the day, while the Liberals and above all the Christian Democrats suffered from their internal division and the contradictory messages they sent out to the voters with regard to these issues. The edge of the Conservatives over the Left, in this regard, is not surprising either, given the enormous differences in the resources available to the two camps during the campaign (see Table 1).

36 If the Christian Democrats did limit their losses in these elections, it was not because of issue voting. If they did not take a more substantial beating, it is, according to the present results, because they could still count on the traditional support of the Catholic population, especially in the regions where they traditionally dominated politics. In this sense the religious cleavage is still contributing to the maintenance of this party (see Table 6).
Finally, let us also stress the strange link existing between the EU membership issue and the vote for the Left. On the one hand, the absence of any reinforcement or crystallization effects tends to demonstrate that issue preferences with respect to EU membership did not play any role in the vote.
for the Left.\footnote{In other words, Left voters presumably mobilize and vote for the Left for other issue-specific considerations (e.g., for issues pertaining to social policy, unemployment, etc.).} On the other hand, not only did we observe that the Left suffered from defection to the Conservatives among Left voters who are strongly opposed to EU membership, but also that the Left was not able to make any gains among EU supporters from the other party families. Consequently, the overall picture for the Left is that of a net loss over the issue of EU membership. This result is all the more astonishing, since EU membership is one of the major policy objectives of the Left parties in general, and of the Social Democrats in particular.

CONCLUSION

In this Note, we have investigated the impact of issue-specific preferences on the voting choices of Swiss citizens during the 1999 federal elections. Elaborating on Lazarsfeld and his collaborators we developed an innovative theoretical framework, which specifies four different effects of issue voting: crystallization, reinforcement, conversion and demobilization. In addition to the inclusion of the fourth mechanism (demobilization), the novelty of our contribution lies in the application of the classic framework to issue voting, and in the formulation of three hypotheses regarding how, under what conditions and to whose advantage issue preferences are likely to influence electoral choice.

The empirical tests confirm the validity of our fourfold conception of issue voting. They also provide strong support for our hypotheses that the impact of issue preferences varies both across issues and across parties. First, the two issues that had the most discriminating effects on voting choices (asylum policy and EU membership) are those that most closely meet the requirements spelled out in our first hypothesis: these issues not only address a problem of highest priority, but they are also highly familiar and polarizing. While we deliberately selected issues which we could reasonably expect to exert an impact on the outcome of the vote, they were not all as well known or as easy to understand as our criteria of ‘familiarity’ presupposed (old age pension, deficits reduction), and one issue (the bilateral treaty) turned out to be more consensual than expected. In line with our first hypothesis, these less familiar or more consensual issues had no or only a limited effect on the outcome of the vote.\footnote{The 1999 Swiss federal elections have notoriously brought the Conservatives a great victory. Our analysis of four different effects of issues preferences show that this success is, in part at least, a result of the Conservatives’ issue-specific campaign. Asylum policy and EU membership are indeed the two issues in which the Conservatives had most invested in the short-term campaign (refugees) and over a longer period (EU integration). The issues which they shaped decisively in the first place, in turn, contributed most to their electoral victory. But our results suggest that the electoral campaign is not the only factor contributing to the establishing of such links. As the case of the maternity insurance quite clearly shows, parallel political campaigns, which are held for institutional reasons other than electoral ones, may have a significant impact on the outcome of the vote as well. From this point of view, the unanticipated effect of those well-meaning groups on the Left who launched a referendum against the tightening of the refugee policy to be voted upon in June 1999 may well have been that they contributed to the electoral victory of the Conservatives in October.}

Secondly, and in line with Hypothesis 2, issue voting turns out to be most pronounced for the political families at the two extremes of the political spectrum (the Left and the Conservatives). In particular, their positioning on the two most important issues of the day has allowed the Conservatives to reinforce their voters’ initial vote intention, to win over converts from the other three party families and to activate undecided voters in their favour. Similarly, the Left also gained from reinforcement, crystallization and conversion at the expense of the Liberals and the Christian Democrats, albeit to a lesser extent than the Conservatives. By contrast, the two intermediary party families (the Liberals and the Christian Democrats) clearly fared less well in this respect, since they could neither benefit from issue-related conversion, nor from crystallization, and hardly from reinforcement.
As predicted by Hypothesis 3, both the Conservatives and the Left nevertheless had to pay a price for their high profile. Thus, the Conservatives’ unrelenting positions on immigration policy and European integration led to the demobilization of some of their original supporters. However, the Conservatives did not suffer from conversion. By contrast, the Left was hurt by both demobilization and conversion to the Conservatives, mainly due to its liberal stance on the refugee issue. Finally, and again as expected, the Liberals and the Christian Democrats did not suffer from demobilizing effects, but they lost voters due to conversion to both the Left and (especially) the Conservatives.

We have presented evidence that the electoral campaign gives rise to changes in issue preferences, too. Such changes also have an impact on the outcome of the vote. But the main issue-specific impact of the campaign is exerted by establishing links between already existing preferences of the voters, on the one hand, and the parties’ positions, on the other hand. While our fourfold conception of issue voting appears as a valuable analytical framework, it should of course be submitted to additional tests in other national contexts. This is an endeavour that we would like to undertake in future research.

**Social Choice Theory and Deliberative Democracy: A Comment**

JONATHAN ALDRED*

In a recent paper, Dryzek and List attempt a reconciliation of Social Choice Theory and Deliberative Democracy. Such an attempt is certainly long overdue and their original article is an important first step. In some ways it succeeds. In particular, they show that much of the imagined tension between the two theoretical frameworks is illusory and due to the mistaken assumption that many of the claims of rational choice theory form part of social choice theory (SCT) too. But in the nature of a Comment, I shall concentrate on aspects of their discussion which in my view warrant more critical scrutiny.

Dryzek and List do not explicitly spell out the conflict which motivates the claimed reconciliation. The nearest they get to defining the conflict is ‘To social choice theorists, the democratic problem involves aggregation of views, interests or preferences across individuals, not deliberation over their content.’ This describes an enormous disagreement over the characterization of the problem, rather than ‘merely’ disagreement about how far rational collective outcomes are obtainable. But Dryzek and List do not attempt a direct reconciliation – they do not address this disagreement. Instead, they examine the much narrower question of whether pre-vote deliberation can help avoid social-choice-theoretic impossibility results. Their ‘reconciliation’ involves a one-way engagement between the two traditions: SCT defines and frames the problem and provides the tools of analysis; deliberation is imported as an empirical feature which generates a solution. SCT poses the problem which deliberation must answer. In contrast, Dryzek and List do not require SCT to respond to the objections raised by many deliberative theorists, concerning for instance its characterization of reasoned judgements as reason-blind preferences, or its account of rationality: ‘The structure of this article follows the results of social choice theory, for it is these that both pose the challenges to

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democracy and pinpoint the locations at which deliberative responses must be sought.' Thus the reader sympathetic to traditions of deliberative democracy may be left with the suspicion that what is being attempted is not so much a reconciliation as a takeover, inspired by methodological convenience.

In this Comment I respond to Dryzek and List’s attempt to demonstrate certain mechanisms by which deliberation permits escape from impossibility results. I argue in the next two sections that two of the putative mechanisms do not succeed. In the final section I return to the broader reconciliation question.

RELAXING UNIVERSAL DOMAIN

In Section III.3, Dryzek and List attempt to connect the domain restrictions of SCT to the kinds of agreement that might emerge from deliberation. Specifically, they argue that deliberation might lead to single-peaked preferences, and so facilitate an escape from various impossibility results. I argue their analysis is incomplete at best, and in several respects misleading.

They begin by defining single-peakedness and the idea of a single dimension together:

A profile … of personal preference orderings is single-peaked if there exists a single ordering of all alternatives from ‘left’-most to ‘right’-most such that each individual has a most preferred position on that ‘left’–‘right’ ordering with decreasing preference for alternatives as they get increasingly distant from the most preferred position. A ‘left’–‘right’ ordering with this property will be called a dimension, labelled $\Omega$.

The next sentence gives a formal definition of single-peakedness in terms of $\Omega$, leaving the reader wondering whether Dryzek and List define a dimension to include the structural property of single-peakedness (the quoted passage), or define single-peakedness in terms of the idea of a dimension (the next sentence). This uncertainty leads to confusion over whether their agreement at a meta-level (which occurs when all individuals ‘agree on a common dimension in terms of which the alternatives are to be conceptualized’) is alone sufficient to ensure single-peakedness. In some places Dryzek and List suggest that it is. For instance: ‘Rationality may finally lead individuals to have single-peaked preferences on the shared dimension. This mechanism requires only agreement at a meta-level (i.e. on a shared dimension)’. And they quote Riker, who seems to define meta-level agreement in terms of single-peakedness: ‘if … voters have a common view of the political dimension (as evidenced by single-peakedness) …’. But Dryzek and List generally seem aware that meta-level agreement does not alone guarantee single-peakedness. However, this leaves the exact nature of their argument unclear. Are there any theoretical or empirical grounds to believe that meta-level agreement might lead to single-peakedness, or make it more likely? If not, it seems that deliberation does not, at least via meta-level agreement, help escape Arrovian impossibility after all.

Before addressing this question, it is worth clarifying the exact mechanisms which may achieve single-peakedness. One route to single-peakedness requires two conditions to be met. First, the group must agree on a single issue which explains or determines the preferences of every individual. Secondly, all individuals’ preferences must be unidimensional in the sense of the Dryzek and List definition of dimension quoted at the beginning of this section – the dimension has an ideal position or value, with alternatives more preferred the closer they are to this ideal. This ensures that individuals agree not merely on a common dimension, but that their preferences exhibit the structure of single-peakedness. The other route to single-peakedness arises from the fact that it is equivalent

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to ‘not worst’ agreement: there exists some alternative about which all individuals agree that it is ‘not the worst alternative’. At least in principle, a group of agents may simply reach direct agreement on one option being ‘not worst’, without having agreed on a single issue that underpins their preferences, let alone one with the requisite structural properties.

Returning to the question of the theoretical or empirical grounds for single-peakedness, the key problem that Dryzek and List downplay is that single-issue preferences may not be unidimensional. Roughly speaking, there are two problematic cases: the single issue either may not be quantitative, or if quantitative, may not be unidimensional. For example, my preference over political candidates may be single issue but not quantitative: I vote solely on the basis of their hair colour. This is not a quantitative attribute, yet in a strong sense, the hair colour of each candidate completely explains my preference between them. Or my preference may be defined entirely by a quantitative attribute, hair length, but not be unidimensional because alternatives are not necessarily more preferred the closer they are to the ideal position (ideal value of the quantitative attribute). I prefer politicians with very short hair, but my second preference could still be for those with very long hair.

The two hair examples suggest that in many cases agreement on a single issue will not lead to single-peakedness. Dryzek and List might respond as follows. They could argue that, following agreement on a single issue, deliberators could criticize those with non-unidimensional preferences as irrational, at least using a ‘communicative’ account of rationality. For example, how could the person who prefers politicians with short hair, but whose second preference is for those with long hair, possibly communicate a reason for her preference? All possible explanations (short hair signals organization, long hair suggests creativity) imply there is not, in fact, only a single issue at stake. But this response to the hair length example does not deal with the hair colour example at all. Relatedly, the hair length example faces a standard objection: even a communicative account of rationality must sometimes give way to expressions of pure taste – my hair length preferences may be just as basic as my hair colour preferences, and no more rationalizable than my preference for chocolate over strawberry ice-cream.

Dryzek and List hint at another way in which single-issue agreement may generate single-peakedness: ‘Supposing … this generalizable interest is associated with a single dimension (such as ecological sustainability), then the informational and argumentative aspects of deliberation may resolve factual disagreements on how alternatives are aligned on that dimension (for example, which options least or most degrade an ecosystem).’ The idea appears to be that ‘not worst’ agreement is more readily achieved once single-issue agreement has been reached. Although a prima facie attractive idea, it is easy to think of counter-examples. The single issue may help entrench conflicting preferences based on factual disagreements over the performance of alternatives on that issue. The British Conservative party under Ian Duncan Smith found it harder to agree about their leader, although most agreed that the leader’s view about ‘Europe’ was the dominant issue.

Finally, while there are no good theoretical grounds for expecting single-peakedness to follow from single-issue agreement, there may be empirical evidence to support the link. Dryzek and List offer no evidence for this specific link, but refer to a study which suggests that deliberation increases

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9 Strictly speaking, of course, any single individual with the preferences described here will still have single-peaked preferences. The definition of single-peakedness ceases to be tautologous only if there are multiple individuals who must fulfil it.

10 I thank a referee of an earlier draft for pointing out this response, which is suggested by the first and last sentences of a paragraph on p. 15 of Dryzek and List’s article: ‘It might be argued that rationality requires one determinate dimension on which preferences are single-peaked, whose identification enables a group to criticize as irrational personal preference orderings which have more than one peak on that dimension … Unless deliberation can produce agreement on one dimension as exclusively relevant, an appeal to rationality alone cannot induce single-peakedness.’

the extent of single-peakedness. Now suppose that in some political institution more single-peakedness was observed after deliberation than before – should deliberative democrats not be delighted? What else but single-issue agreement could have led to increased single-peakedness? There are at least two immediate problems with this tempting interpretation.

First, our intuitions run out when we are seeking to explain not full single-peakedness, but an observed patterning of preferences which constitutes increased single-peakedness. Such patterning could plausibly have been reached by (a substantial degree of) direct ‘not worst’ agreement, or reflect less welcome developments during deliberation, such as ‘group-think’ pathologies, group-wide misunderstandings of information presented to the deliberators, and forceful deliberators who dominate discussion. The tendency of such phenomena to generate certain patterns of preferences might be exaggerated by strategic behaviour. Secondly, even setting these possibilities aside, the assumption that meta-level agreement is a plausible cause of single-peakedness is undermined by the multidimensional nature of many decision problems. This suggests that, except in obviously unidimensional contexts, even if we observe single-peakedness, Dryzek and List provide no convincing explanation of why we do so. Without such understanding, it is difficult to see how deliberative institutions might be designed or reformed in order to improve deliberation and secure single-peakedness.

To sum up, their defence of the claim that single-issue preferences will be single-peaked, or more likely to be so, seems a weak one. This matters not just because it undermines their argument that deliberation may allow various impossibility results to be side-stepped, but also because the claim links a notion in deliberative theory – agreement on the key ‘issue’ – with a formal structural property in social choice theory, single-peakedness. Such claims seem indispensable to the broader reconciliation project. I shall return to this point in the last section.

RELAXING INDEPENDENCE OF IRRELEVANT ALTERNATIVES

In section III.4, Dryzek and List make a surprising mistake. They assert that ‘the non-existence of [Social Welfare Functions] SWFs satisfying (I) (together with (U), (P), (D)) implies the inherent vulnerability of democracy to manipulability by changes of the agenda.’ Shortly after, they refer to ‘the logical possibility of agenda manipulation (implied by violations of (I)).’ Their claim regarding the exact link between agenda manipulation and the independence of irrelevant alternatives condition (I) is left somewhat unclear; but from that link they conclude that in situations where agenda manipulation may be ruled out (perhaps after deliberation), condition (I) may be relaxed, allowing Arrow’s impossibility result to be safely set aside. The problem with this argument is that the link is a weak one at best.

Arrow’s condition (I) has widely, and erroneously, been interpreted to demand consistency of the social choice in the face of variations in the agenda or ‘feasible set’ of alternatives, or the order in which the alternatives are voted upon. For instance, it might be held that the removal of an alternative from the feasible set should not affect the social choice between those alternatives remaining on the agenda. Such a property is one of inter-agenda consistency. But the standard definition and interpretation of condition (I) in social choice theory (including Dryzek and List’s definition) makes no such demand. It is a condition of inter-profile consistency, insisting that for a given agenda, the social choice between any two alternatives may change only if the profile of individuals’ preferences has changed in a particular way: some individual’s ranking of the two alternatives against each other must have altered. The reasons for the widespread mis-interpretation

of (I) need not detain us here, but the mis-interpretation is of more than technical interest. The key point is that (I) is logically independent of all inter-agenda consistency properties. Since (I) does not concern inter-agenda consistency, political conditions (such as prior deliberation) ensuring absence of agenda manipulation provide no particular reason to abandon it.

Moreover, no useful reconstruction of Dryzek and List’s argument in terms of some other condition that does concern inter-agenda consistency appears to be available. Recent social choice results have arguably demonstrated that Arrovian-type impossibility persists even without any imposed condition of inter-agenda consistency. In particular, Sen has proven a ‘set-specific’ impossibility theorem, showing that Arrovian impossibility arises even when preference is defined purely relative to a given, fixed set of alternatives. Such a definition does not say anything about preference if that set is varied, and hence makes no inter-agenda consistency demands. To summarize, even if agenda manipulation may be ruled out post-deliberation, and so no inter-agenda consistency conditions need be imposed, the impossibility problem remains.

TOWARDS A RECONCILIATION?

As argued in the introduction, Dryzek and List do not attempt a reconciliation, but a narrow, one-way engagement. They claim social choice theory poses problems for theories of deliberative democracy, but there is no mention of challenges in the reverse direction. What challenges? Many deliberative theorists argue that SCT and deliberative democracy make radically different assumptions about the purpose and nature of democratic procedures. Examples include their competing treatments of rationality, their understandings of the autonomy of the political agent, or the legitimacy of democratic institutions. In short, the entire social-choice-theoretic framework is fundamentally incompatible with deliberative democracy. Dryzek and List might reasonably point out that addressing such a critique is beyond the scope of their analysis, although perhaps they should have acknowledged its existence.

However, a more limited but directly relevant critique of SCT may be constructed. This claims that even in a context where political choice can prima facie be understood in aggregative terms, SCT is difficult to reconcile with deliberative democracy. This is because, in order to accommodate pre-vote deliberation, SCT must place unhelpful constraints on the form and function of this deliberation. Two illustrations follow. First, sometimes aggregation cannot be used to reach a decision when deliberation fails to secure agreement – if the disagreement is about which aggregation process should be adopted. Put differently, SCT is not reflexive in the way that deliberative procedures are often claimed to be, and attempts to deal with this problem inevitably generate an infinite regress. Secondly, many deliberative democrats reject SCT’s characterization of the output of political decision making as the selection of some alternative(s), or a ranking of alternatives. They argue that democracy often requires a more ‘open’ output, such as a report giving reasons and caveats. They challenge the unquestioned assumption that voting is required ‘to reach a decision’ in the absence of unanimity – why, if the deliberators do not have the power to turn their decisions into political actions (for instance, because a government agency retains this power), is there any need to reduce their deliberations to a closed output?  

19 This criticism is most noticeable in the debate between deliberative institutions and economic valuation as methods of participatory environmental decision making. Deliberative democrats do not generally welcome the recent proposal to ‘reconcile’ the two approaches by preceding an economic valuation survey (yielding a ‘closed’ monetary valuation output) with a focus group discussion.
The objections to SCT from deliberative theorists share a common feature – a concern with the content of preferences, rather than their structure. It is striking that Dryzek and List largely avoid any assessment of preference content, even when that would form a natural part of their analysis. Most obviously, in the empirical study of the effect of deliberation on single-peakedness co-authored by List, no conclusion about why and how single-peakedness increased can be drawn because the authors do not mention the matter of most interest to deliberative democrats – what the deliberators said, the reasons they gave. For another example, Dryzek and List cite Sen’s distinction between two kinds of preference input to the aggregation, ‘judgements’ and ‘interests’. 20 But Dryzek and List distinguish the two according to the source of the input, while Sen’s typology appeals to the content of preferences, not their source. 21 This is not a mere semantic quibble, since one purpose of Sen’s typology was to explore the scope of SCT, a key question for Dryzek and List’s reconciliation project. Equally relevant, Hurley has used Sen’s typology to argue that some of Arrow’s axioms are less appropriate for judgement aggregations. 22

In conclusion, a more balanced reconciliation between SCT and deliberative democracy would need to engage with some of the concerns of deliberative theorists. Presumably Dryzek and List have a methodological reluctance to examine preference content or undertake qualitative empirical research. But while these methodological strictures might be appropriate within some branches of rational actor theory, they seem wholly inappropriate in any reconciliation project. Most deliberative democrats maintain that any assessment of the extent of agreement among deliberators – at both ‘substantive’ and ‘meta’ levels – is inevitably subjective and interpretive. Probing the content of preferences and the reasons behind agreements is also an essential element in assessing the other goals of deliberation (such as its educative qualities or its capacity to encourage civic virtues), and informing institutional design. Hence it seems pointless to try to avoid it when evaluating single-peakedness. In focusing on the structure of preferences rather than the reasons behind them, Dryzek and List have not so much provided a reconciliation with deliberation as with ‘functional talk’. It is a welcome improvement on ‘cheap talk’, but not one which will leave many deliberative democrats feeling reconciled.


Social Choice Theory and Deliberative Democracy: A Response to Aldred

JOHN S. DRYZEK AND CHRISTIAN LIST*

Jonathan Aldred shares our desire to promote a reconciliation between social choice theory and deliberative democracy in the interests of a more comprehensive and compelling account of democracy. 1 His comments on some details of our analysis – specifically, our use of Arrow’s

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conditions of universal domain and independence of irrelevant alternatives – give us an opportunity to clarify our position. His discussion of the independence condition in particular identifies some ambiguity in our exposition, and as such is useful. We are less impressed by the way Aldred characterizes the overall terms of the reconciliation we propose. We believe that his argument on this matter should be resisted because it provides deliberative democrats with a bad excuse to dismiss social choice theory altogether, which is surely not what he intends.

RELAXING UNIVERSAL DOMAIN

One hypothesis we defended is that – under suitable conditions – group deliberation induces single-peakedness in individual preferences across a group. If this hypothesis is true, post-deliberation preference profiles fall into a restricted domain to which Arrow’s impossibility theorem does not apply and in which Condorcet winners exist. We suggested that deliberation may induce single-peakedness via producing ‘agreement at a meta-level’, that is, agreement on a shared dimension in terms of which all group members conceptualize the issue. We pointed out that this mechanism might fail in situations of high issue complexity and discussed mechanisms of multidimensional preference structuration in such situations.

Aldred argues that our analysis is ‘incomplete at best, and in several respects misleading’. While further research on deliberation’s effects on preferences is needed – we do not claim to have provided a ‘complete’ analysis – we nonetheless hope that our arguments are transparent. As just noted, we defended a hypothesis and a mechanism underlying it. We are not sure whether Aldred’s objection is mainly directed at the hypothesis or at the proposed mechanism. Let us briefly revisit both.

The hypothesis that – under suitable conditions – group deliberation induces single-peakedness in individual preferences is an empirical hypothesis. It is neither an a priori truth, nor can we (or should we) rule out the possibility of counterevidence a priori. Indeed, the possibility of counterevidence makes the hypothesis falsifiable and thus empirically meaningful and non-trivial. Aldred’s theoretical ‘counterexamples’ illustrate this possibility. What matters is whether the hypothesis is supported by empirical evidence. Here the existing – admittedly still limited – evidence on deliberation-induced preference change is consistent with our hypothesis, albeit in a more fine-grained form. Using data from Fishkin’s deliberative polls, List, Fishkin, Luskin and McLean have shown that, under certain conditions, post-deliberation preference profiles are more single-peaked than pre-deliberation ones, where the degree of single-peakedness is measured by the maximal proportion of individuals whose preference orderings have no more than one peak on a common dimension.

The question of whether the hypothesis is true is distinct from the question of what precise mechanism explains its truth. The ‘meta-agreement’ mechanism we proposed has three parts, where each is itself a falsifiable empirical hypothesis. Before we restate the three parts, let us recall two different concepts of a dimension. A dimension in the semantic sense is an attribute in terms of which the decision alternatives are conceptualized by the decision makers, such as the degree of economic liberalism or the degree of secularization. A dimension in the formal sense is a purely geometrical ‘left’–‘right’ alignment of the alternatives, which does not carry with it any particular interpretation. Black’s definition of single-peakedness requires only the existence of a common formal dimension such that all individuals’ preferences have no more than one peak on that dimension. While that formal dimension might be interpreted by the individuals in terms of some semantic dimension, such an interpretation is not required for defining single-peakedness. The three-part mechanism we have in mind can now be summarized as follows:

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(1) Under suitable conditions, group deliberation leads individuals to identify a common semantic dimension in terms of which to conceptualize the decision alternatives.

(2) For a given semantic dimension, group deliberation leads individuals to agree on a corresponding formal dimension, spatially ordering the alternatives from ‘left’-most to ‘right’-most in terms of the given semantic dimension.

(3) Once a semantic dimension has become focal and a corresponding formal dimension has been agreed on, group deliberation leads each individual to determine his or her most preferred position (‘peak’) on that formal dimension, with decreasing preference as alternatives get increasingly distant from the individual’s most preferred position.

Our claim was that, if parts (1), (2) and (3) occur jointly, then the resulting post-deliberation preference profile will satisfy single-peakedness. We noted in our article that this is an ‘if–then’ claim. In particular, we take the claim to be defensible irrespective of whether or not its ‘if’ condition is empirically correct. As parts (1), (2) and (3) are falsifiable empirical claims, it is possible for each to be false. We noted that issue-complexity may undermine part (1). Aldred argues that some semantic dimensions may not be linear, in that they may not correspond to a formal dimension, thereby undermining part (2). He also argues that individual preferences may sometimes fail to be single-peaked even on an agreed-upon formal dimension, thereby undermining part (3). This is perhaps similar to our example of a radical environmentalist who prefers wilderness preservation to desecration to compromise development. We concede these possibilities, given that parts (1), (2) and (3) are falsifiable empirical claims. Our argument, however, was that in a deliberative setting, once part (1) occurs – that is, once some semantic dimension has become focal, via deliberation’s social and reflective aspects – parts (2) and (3) are also likely to occur: part (2) via deliberation’s informational and argumentative aspects, and part (3) via its argumentative aspects together with rationality. So far, no empirical study has been designed for testing these three parts of our proposed ‘meta-agreement’ mechanism, but we would welcome appropriate research.

Aldred also argues that group deliberation can induce single-peakedness through direct (substantive) agreement among the individuals that one particular decision alternative is not worst. When there are only three alternatives, agreement that one is not worst is indeed sufficient for (in fact, equivalent to) single-peakedness, but when there are more than three alternatives this is not generally the case. Here a stronger form of agreement is necessary. For every triple of alternatives, the individuals must agree that one alternative among that triple is not worst. While the latter condition is sufficient for the existence of Condorcet winners, it is still subtly weaker than single-peakedness. It is sufficient only for (in fact, equivalent to) single-peakedness for all triples of alternatives, a special case of Sen’s value-restriction condition. It is not obvious that individuals can easily reach agreement, for every triple, that one alternative among the triple is not worst without some underlying structural agreement. For this reason, we are not convinced that direct ‘not worst’ agreement without any agreement at a meta-level is a generally plausible route to deliberation-induced single-peakedness.

**RELAXING INDEPENDENCE OF IRRELEVANT ALTERNATIVES**

Another hypothesis we defended is that group deliberation can induce agreement on the set of relevant decision alternatives. If this hypothesis is true, then the Borda rule and other positional rules – often criticized for their vulnerability to certain forms of agenda manipulation – become more defensible social decision procedures. Among Arrow’s conditions, independence of irrelevant alternatives rules out such procedures. We suggested that, if in a deliberative setting the set of alternatives is non-arbitrarily demarcated, then a relaxation of Arrow’s independence condition –

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TABLE 1  An Illustration of the Borda Rule’s Cloning Manipulability

<table>
<thead>
<tr>
<th>Situation A</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>1</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>1st pref.</td>
<td>y</td>
<td>x</td>
<td>z</td>
</tr>
<tr>
<td>2nd pref.</td>
<td>x</td>
<td>z</td>
<td>x</td>
</tr>
<tr>
<td>3rd pref.</td>
<td>z</td>
<td>w</td>
<td>y</td>
</tr>
<tr>
<td>4th pref.</td>
<td>w</td>
<td>y</td>
<td>w</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situation B</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>1</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>1st pref.</td>
<td>y</td>
<td>x</td>
<td>z</td>
</tr>
<tr>
<td>2nd pref.</td>
<td>x</td>
<td>v</td>
<td>x</td>
</tr>
<tr>
<td>3rd pref.</td>
<td>v</td>
<td>z</td>
<td>v</td>
</tr>
<tr>
<td>4th pref.</td>
<td>z</td>
<td>w</td>
<td>y</td>
</tr>
<tr>
<td>5th pref.</td>
<td>w</td>
<td>y</td>
<td>w</td>
</tr>
</tbody>
</table>

which according to Riker ‘prevent[s] the rigging of elections’ – may be more acceptable in that setting.\(^7\)

Aldred argues that we ‘make a surprising mistake’, in that the link we suggest between violations of independence of irrelevant alternatives and agenda manipulation ‘is a weak one at best’. Aldred points out that Arrow’s independence condition is often confused with another independence condition and suggests that this confusion may underlie our argument. We are aware of the difference between the two conditions.\(^8\) One – Arrow’s – states that the social preference over \(x\) and \(y\) should depend only on individual preferences over \(x\) and \(y\) and not on individual preferences over third alternatives. Another – often associated with Radner and Marschak – states that, if \(x\) is socially chosen from some set of alternatives \(X\), then \(x\) should also be chosen from any subset of \(X\) that contains \(x\).\(^9\) The relation between the two conditions is subtle and non-trivial, and we agree that one should not confuse them.

While our technical definition of Arrow’s independence condition and the Borda rule is correct, our informal exposition has indeed been ambiguous and thus perhaps subject to the common confusion Aldred describes. Nonetheless, we believe that with some clarification our main argument is robust. It is true that the pertinence of Radner and Marschak’s condition to agenda manipulation is more immediate, but Arrow’s condition is by no means unimportant. Decision procedures violating Arrow’s condition – such as the Borda rule and other positional rules – are typically also vulnerable to some form of agenda manipulation, especially so-called cloning manipulation.\(^10\) Furthermore, that vulnerability is related to the violation of Arrow’s independence condition. To illustrate, consider the Borda rule and compare two situations, A and B, as shown in Table 1. In both situations there are fifteen individuals.

In situation A, there are four decision alternatives, \(x\), \(y\), \(z\) and \(w\). The social preference ordering under the Borda rule is \(zPxyPyw\).\(^11\) The Borda winner is \(z\). Now suppose an agenda setter (who


\(^10\) Cloning manipulation is distinct from agenda manipulation via strategically choosing the order in which votes are taken.

\(^11\) In situation A, the Borda scores of the alternatives are as follows: \(x : 1 \times 2 + 6 \times 3 + 8 \times 2 = 36\); \(y : 1 \times 3 + 6 \times 0 + 8 \times 1 = 11\); \(z : 1 \times 1 + 6 \times 2 + 8 \times 3 = 37\); \(w : 1 \times 0 + 6 \times 1 + 8 \times 0 = 6\).
dislikes $z$ and likes $x$) introduces a new alternative, $v$, where $v$ is a ‘clone’ of $x$: it is preferred by all individuals to any alternative that $x$ is preferred to, but dispreferred to $x$ itself. Individual preferences over all other alternatives remain fixed. So we are in situation B. Now the Borda ordering is $xPzPvPyPw$.\(^{12}\) The Borda winner is $x$. The presence of alternative $v$ reverses the social ordering over $x$ and $z$, although $v$ is a non-winning alternative and individual preferences over all other alternatives are unchanged: the Borda rule is cloning manipulable.\(^{13}\)

To see that the Borda rule’s cloning manipulability is related to its violation of Arrow’s independence condition, consider situation $A^*$, as shown in Table 2. Here a new alternative $v$ has also been added to the alternatives in situation A, though $v$ is not a clone of $x$, but dispreferred by everyone to all other alternatives. The individual preferences over $x$, $y$, $z$ and $w$ are the same as in situation A, and so are the social preferences over $x$, $y$, $z$ and $w$ and the Borda winner.\(^{14}\) The presence of alternative $v$ – being at the bottom of everyone’s ranking – makes no difference. The individual preferences over $x$, $y$, $z$ and $w$ in situation $A^*$ also coincide with those in situation B, and so a decision procedure satisfying Arrow’s independence condition would have to generate the same social preferences over $x$, $y$, $z$ and $w$ in situations $A^*$ and B. The Borda rule, however, violates independence and generates a different social preference over $x$ and $z$ in situations $A^*$ and B. The agenda manipulator in effect exploits this violation of independence when introducing the clone $v$ in situation B (or when persuading individuals that the alternative $v$ at the bottom of everyone’s ranking in situation $A^*$ is ‘actually’ a clone of alternative $x$ and ought to be individually ranked just below $x$ as in situation B).

Our main argument concerning independence of irrelevant alternatives can now be summarized as follows:

1. If Arrow’s independence condition is relaxed, the Borda rule and other positional rules become available as decision procedures satisfying Arrow’s other conditions.
2. These decision procedures are typically vulnerable to certain forms of agenda manipulation (and are often criticized for this vulnerability).
3. If the logical possibility of agenda manipulation is not practically exploited in deliberative settings – for instance, because deliberation induces agreement on the set of alternatives – then that logical possibility is less of a practical threat in such settings, and the use of the Borda rule and related rules becomes more defensible.

\(^{12}\) In situation B, the Borda scores of the alternatives are as follows: $x: 1 \times 3 + 6 \times 4 + 8 \times 3 = 51$; $y: 1 \times 4 + 6 \times 0 + 8 \times 1 = 12$; $z: 1 \times 1 + 6 \times 2 + 8 \times 4 = 45$; $w: 1 \times 0 + 6 \times 1 + 8 \times 0 = 6$; $v: 1 \times 2 + 6 \times 3 + 8 \times 2 = 36$.


\(^{14}\) In situation $A^*$, the Borda scores of the alternatives are as follows: $x: 1 \times 3 + 6 \times 4 + 8 \times 3 = 51$; $y: 1 \times 4 + 6 \times 1 + 8 \times 2 = 26$; $z: 1 \times 2 + 6 \times 3 + 8 \times 4 = 52$; $w: 1 \times 1 + 6 \times 2 + 8 \times 1 = 21$; $v: 1 \times 0 + 6 \times 0 + 8 \times 0 = 0$. The introduction of alternative $v$ does not affect the differences between the Borda scores of $x$, $y$, $z$ and $w$ as given in situation A. The scores of $x$, $y$, $z$ and $w$ in situation $A^*$ are simply equal to those in situation A plus 15 (i.e. plus 1 times the number of individuals).
A worry about agenda manipulation of the cloning type is just one reason why many social choice theorists have insisted on independence of irrelevant alternatives. Arrow’s independence condition may also provide protection against certain forms of strategic manipulation of the Gibbard–Satterthwaite type. Here the arguments in our article regarding a relaxation of strategy-proofness may apply.

We do not suggest that deliberation-induced agreement on the set of alternatives will solve all potential problems opened up by a relaxation of Arrow’s independence condition. But we do suggest that such agreement may make one important such problem less threatening.

THE TERMS OF RECONCILIATION

Aldred’s most fundamental objection to our reconciliation is that it is ‘not so much a reconciliation as a takeover’ by social choice theory because our discussion is framed in terms of the challenges social choice theory makes to deliberative democracy, rather than vice versa. Aldred points to both ‘radical’ and ‘more limited’ challenges that deliberative democrats might make to social choice theory.

The main reason for our strategy of beginning with the social-choice-theoretic challenge to deliberative democracy can be found in the different character of the two theories. Deliberative democracy is a normative theory based on ideals about how political interaction should proceed. Social choice theory is also normative, but more guardedly so. Its starting point is a set of analytics that reveal how difficult it is to achieve different normative criteria. To deploy the idealism of deliberative democracy against social choice theory is easy but unproductive, likely to lead only to dismissal of the social choice critique of democracy as irrelevant and misguided because it misses the essence of politics and the humans that engage in it. (For example, in the way Pateman deploys a slightly different radical democratic idealism against social choice theory.15) This is where Aldred’s ‘radical’ challenge would lead. Aldred is correct that we do not mention this radical challenge; the aim of our article is to move beyond crude radical challenges.16

But what of Aldred’s ‘more limited’ challenge? Aldred’s characterization of deliberative democratic theory and what it might say in such a challenge is a bit dubious, and he does not cite a single deliberative democrat in its support (or, indeed, on any other topic in his paper). Most of the positions he attributes to deliberative democrats en masse are actually highly contested within the field. His first point – that deliberative democrats should not allow preference aggregation when there is a dispute over an aggregation procedure itself – is not very telling, because deliberation itself has no alternative solution to the problem of infinite regress. What Aldred’s other points here have in common is that they use some of the weakest and most problematic aspects of deliberative theory. If some (unidentified) deliberative democrats actually do prefer ‘open outputs’ to a ranking of alternatives, that plays into the hands of critics who charge deliberative democrats with lacking a logically complete theory of democracy – because there is no account of how policy decisions get made.17 To say as Aldred does that deliberative democrats have ‘a concern with the content of preferences, rather than their structure’ is fair enough. But deliberative democrats can be criticized for having too much concern with preference content; for example, Gutmann and Thompson are excessively prescriptive in saying what positions good deliberators should take on the substance of controversial policy issues.18 At any rate we do not avoid the issue of preference content as Aldred

alleges – see for example our discussion of generalizable interests, basic needs and preferences involving a lack of respect for other deliberators. This discussion is in the context of preference structuration\(^\text{19}\) – but that is exactly where Aldred believes it ought to belong, when he says we should not avoid ‘probing the content of preferences and the reasons behind agreements … when evaluating single-peakedness’. Earlier we treated reflection on preferences ‘in the knowledge that these preferences have to be justified to others’ as a defining feature of deliberation that we subsequently bring to bear.\(^\text{20}\) Again, there is no avoidance of scrutiny of preference content. There is much to the theory of deliberative democracy (including its treatment of preference content) that we did not address in our article, but Aldred has not established that any of these omissions really matter.\(^\text{21}\)

Far from attempting a hostile takeover of deliberative democracy on behalf of social choice theory, we argue that social choice theory gives an additional set of reasons (not of course the only reasons) for being a deliberative democrat. In this sense, deliberative democracy assimilates social choice theory – the very opposite of the ‘takeover’ that Aldred alleges. But takeover of any sort was never the point, and we would be dismayed if any deliberative democrats followed Aldred in believing this to be the case.

\(^{19}\) Dryzek and List, ‘Social Choice Theory’, pp. 15–16.
