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**ST33. Communication politique et mobilisation électorale. Bilan et perspectives des dispositifs d'enquête**
**ST33. Political communication and electoral mobilization. State of the art and perspectives for research design**

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# An analysis of rolling cross section data in a multiparty system

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## *1. Introduction and the usual stuff*

Leaders and parties are often the object of complicated and ambivalent feelings by the voters. Such feelings may play a role in the way voters make sense of their political orientation and make up their minds when voting. During the 2006 electoral campaign a about 8044 Italians were interviewed (CATI) about their feeling of sympathy (scale 1-10) for 8 leaders heading 9 parties/coalitions; about 200 telephone interviews were held each day, according to the same sample design, during the forty days run op to the election (total 8044 interviews). Half, of the respondents, 4000, were re-interviewed after the election. The remainder of this section presents some standard results obtainable from such a Rolling Cross Section RCS) design. The second section of the paper discusses the methodological problems faced collecting RCS data in Italy.
In its substantive part the paper attempts to contribute to the analysis of three issues The first of these is whether the feelings of the electorate changed during the campaign. The third section presents an unfolding analysis of the sympathy data, stably two-dimensional for the parties, but essentially one- dimensional for the leaders before the election, and two dimensional, similar to the solution for the parties, after the election. The second issue of this part of the paper defines a puzzle. Section 4 shows mean sympathy towards leaders and parties were practically stable during the 40 days before the election, but were more positive, by about .5, after the elections. The lack of change during the campaign, and who was more likely to increase their sympathy for leaders and parties after the election forms the puzzle. The last section treats the third issue: what is the political meaning of those feelings.
Overall the paper aims to show that more information can be gotten from RCS data than is usually done and makes some suggestions in this direction.

The 2006 campaign was held among widespread expectations that the left coalition would win. Given the electoral law, adopted just before the elections, votes for a party counted for the coalition of which is was a part, and the coalition with a majority received additional seats in the second chamber of parliament so as to guarantee a majority. Despite predictions that the left would win with an ample majority, it did win by only a handful of votes, and in the Senate it depended on votes from life long senators for its majority. Given this situation it is interesting to see how vote intentions developed. Diagram 1.1 presents the unweighted results of the estimated vote day by day, interpolated with a lowess smoother (Cleveland, Devlin 1988 ). Lowess is a locally weighted least square method iteratively deemphasizing outliers.. The parameter controlling the local width of the window (binsize, tension) is given as a fraction of the data (here .3 of 40 days).
In the figure points give the fraction that intended to vote right (blue circles) or left (red circles), the total does not sum to 1 as respondents who either did not know yet, or were unwilling to tell (DK/WT), are left out. One, among others, of the problems with this analysis is that, while the data can be considered reasonable daily samples of a population, they can not be considered such of the Italian electorate. This may be dealt with, in part, by weighing the data, giving a somewhat different picture of the overall result , in diagram 2.2.
A general comment is possible, the two curves for the unweighted data can be interpolated by fifth order polynomials (on the frequencies; left against right or else, chi2 =9.5 2 df p=,009 for term of days to the fifth) This is less clear for the weighted data since the use of weighted frequencies in a log-linear model gives unclear results for standard errors and fit (in chi square terms). However, such considerations rarely are part of the presentation of results of rolling cross section data. (cf Loader 1999). In the further analysis of other questions in the RCS no variables were found having fifth order polynomial patterns. This makes it unlikely that any simple explanation can be given for these patterns, nor will this paper attempt to do so.

***Figure 1.1. Unweighted data on vote intention for Left and for Right (tension: .3)***

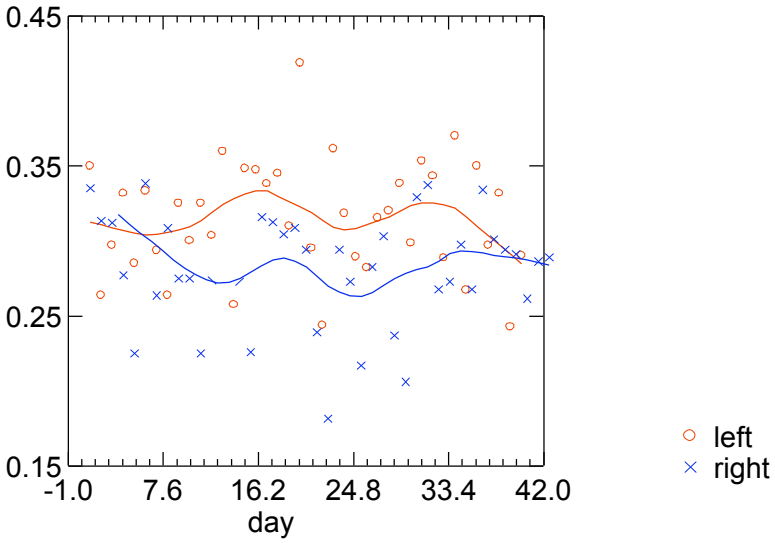
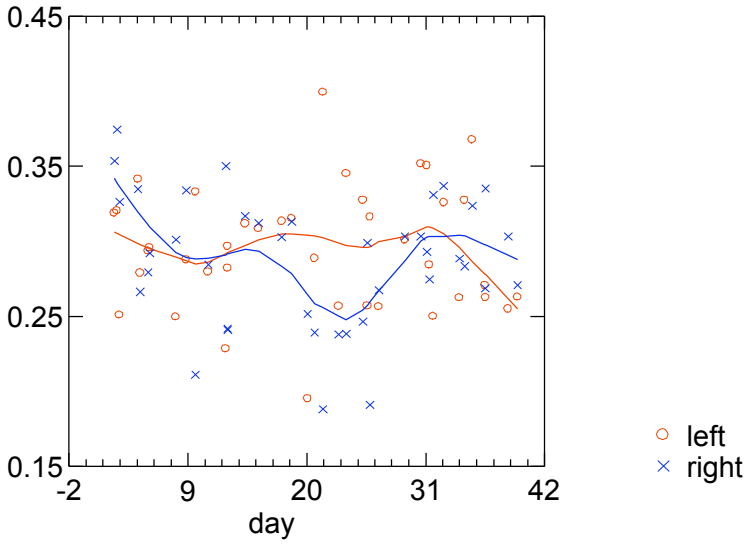



***Figure 1.2. Weighted data on vote intention for Left and for Right (tension: .3)***




An example of a campaign effect in the RCS data can be given. Consider the division among employees and self employed workers. During the campaign the vote intentions for the right among the self employed steadily increased, and similarly for the left among the dependent workers. (cf. de Lillo, Schizzerotto 1985; Goldthorpe, Hope 1974). Diagram 1.3 graphs the development. Table 1.1 present the chi square values for the unweighted data, in a binomial regression showing that the main effect is due to being an autonomous or dependent worker, (model 3 chi2 = 77,1 with 77 df) but also shows a small, barely significant (chi square 4.2 , 1 df p.038) development over time of vote intentions according to income source.

***Figure 1.3. Vote intention for the Right, autonomous and dependent workers (unweighted data, tension: 1.0)***

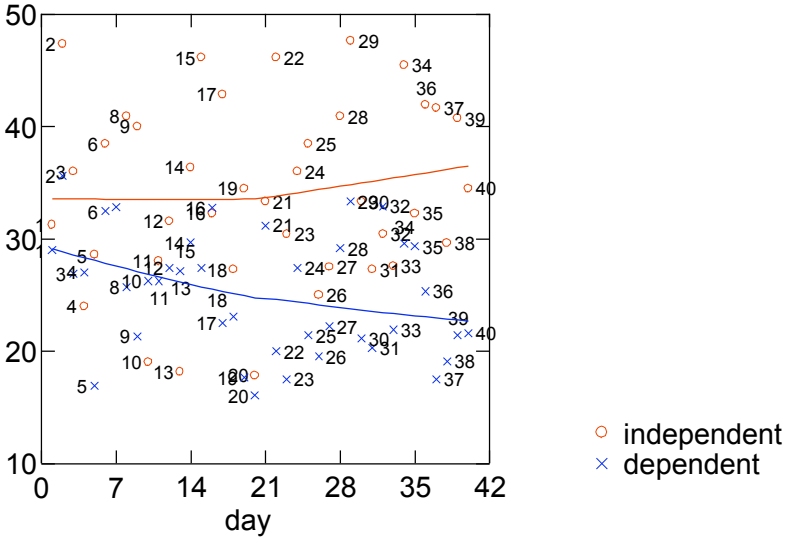


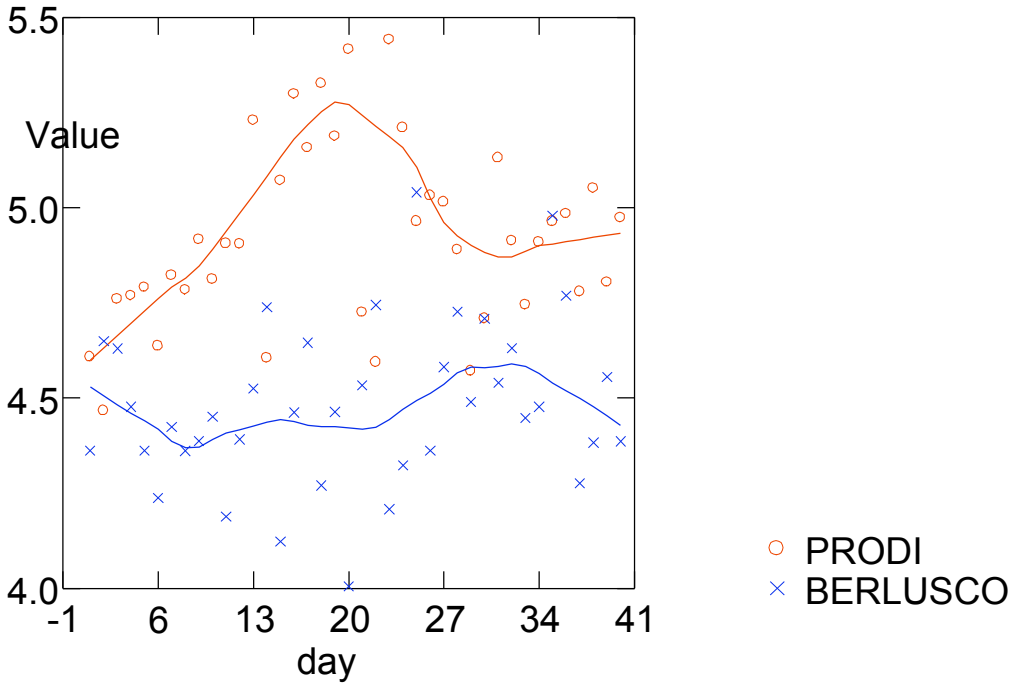

***Table 1.1 Vote intention by independent-dependent worker during campaign (binomial regression, unweighted data chi square tests)***

| models | chi sq | df | p | diff chi | df | p |
|---|---|---|---|---|---|---|
| 1) mean only | 103.3 | 79 | ,035 | | | |
| 2) mean + day | 102.1 | 78 | .035 | 1,1 | 1 | ,3 |
| 3) mean + day + dip | 77.1 | 77 | ,475 | 25.0 | 1 | ,0000 |
| 4) mean+ day*dip | 72.9 | 76 | ,58 | 4.2 | 1 | ,038 |

It is unclear whether this result is an example of economic voting, or of class voting. It is, in any case, only a very partial explanation of some of the vote intentions. (cf Pisati 2010; Clark, Lipset 1991, 2001 ; Bellucci 2001,2002; Ballarino, Schadee, Vezzoni 2009 Dorussen,Taylor 2002; van der Brug, van Eijk, Franklin 2007).

Finally, since there were questions about sympathy for leaders(and parties) in the questionnaire Diagram 1.4 graphs the mean sympathy score (scale from 1 to 10) for the two coalition leaders. The graph is correct, the point is that Berlusconi is often valued quite low or quite high (large standard deviation, see section 4), while Prodi is valued more frequently in the middle ranges. The weighted data showed essentially the same results and are not presented here. There were no special effects in these diagrams for the days the two television debates between Berlusconi and Prodi took place.
There is a problem here. The choice of smoother is often made, as here, by eye (cf Silverman 1986). The main impact on the interpolated curve is due to the size of the local window (tension), the larger the window the more details disappear. As shown in section 4 the mean evaluation by week (Table 4.3) of the these two leaders does not change much. From the graph this is plausible for Berlusconi, but not for Prodi (the curve presents a peak in the middle as a quadratic function, but the range of weekly means is from 4.9 to 5.2, though significant ( see page ?? Table 4.3). This raises some issues about the evaluation by eye of such graphs, and more in general about statistical evaluation of such graphs often used to present results from RCS data.

***Diagram 1.4 mean sympathy for Prodi and Berlusconi during campaign***
***unweighted data, smoother lowess, tension .35***




The foregoing just suggests some of the kind of things often done with this kind of data, but apart from the sympathy data this paper does not develop or extend such analyses any further. Implicitly questions are raised about the effect of weighting and sample distortions (and missing data). Before continuing the analysis of sympathy scores for leaders and parties in sections 3 (unfolding), 4 (means) and 5 (multilevel), where the results of the panel aspect of these RCS data are also considered, the distortions of the realized sample with respect to the Italian electorate are discussed.

## *2. Data : distortions between realized and target sample*

8044 telephone interviews, 200 or slightly more a day, were held in the 40 days of the run up to the 2006 political election; 4000 respondents were interviewed again after the election.
The sample design used two forms of stratification. The first regarded the territory. Italy was divided in three zones, North (standard Northern regions without Emilia), Centre (Central regions plus Emilia) , and South with Islands (Southern regions, Sicily and Sardegna) In each of these zones a threefold distinction was made between small, medium and large towns. In each of the nine cells of this stratification towns were listed according to the fraction of the vote, gotten in the 2001 election by the coalitions running in 2006. This list was ordered by percentage vote for the right and

split at the median in terms of the 2006 electorate (for the coalitions in 2001), so as to be sure that overall political orientation of towns was represented in the sample for future integrations of town data (not presented here). Extraction of telephone numbers in each of the eighteen combinations of zone-townsize-political orientation was proportional to electorate size in the town (data Istat February 2006). Numbers without answer were tried twice again the same evening, and twice an evening for an additional week, in different hours, to provide for late or rare responders. (cf Kernski, Waldman in Romer 2004). This part of the sample design gave no problems and the realized sample differed only by a few cases from the stratification design. Some additional controls for more detailed town size and regions in combination showed no notable distortions. Further details can be obtained from the file and its description.

The second stratification, here called quota (quotum), created more, and somewhat serious, problems. It dealt with information available only once the interviewer had a respondent on line. The main quota were, within each of the three zones, a combination of age, divided in three groups, from 18 to 34 years inclusive, 35 to 54 years of age inclusive, and 55 years or older, gender and schooling, Students were classified by the type of study they were actually following (mainly tertiary, though there are some higher secondary students voting for the first time).

***TABLE 2.1 age by groups of educational titles quota***

| AGE | EDUCATION | in sample freq | % | target freq | % |
|---|---|---|---|---|---|
| 18-34 | obligatory (lower secondary) or less | 823 | 10 | 808 | 10 |
| 18-34 | higher sec or university | 1431 | 18 | 1266 | 16 |
| 35-54 | obligatory (lower secondary )or less | 1413 | 18 | 1468 | 18 |
| 35-54 | higher secondary, tertiary | 1462 | 18 | 1346 | 17 |
| over 55 | obligatory (elementary or less) | 1567 | 19 | 1821 | 23 |
| over 55 | lower and higher secondary, tertiary | 1348 | 17 | 1336 | 17 |
| Total | | 8044 | | 8044 | |

The division in education was made according to what was obligatory schooling at the appropriate age in the relevant period. For respondents up to 54 years of age this led to a division between lower secondary (or less) and higher secondary (or more), for those of 55 years or more this led to a division of elementary (or less) and all forms of further schooling. The target was constructed from ISTAT data using the 2005 editions of the current labour survey (Forze Lavoro), which is a regionally representative sample of families. The six quota were further divided by zone (already defined) and sex, for a total of 36 quota. As there were no difficulties regarding the division by zone or gender we do not present further detail.

There are two sorts of problems with education in samples in Italy. The first regards the definition of the target. Census education data are only published in any detail with great delays (the data by age by province were available only in 2007 for the 2001 census), and tend to be out of date for the youngest age cohorts, due to the rapidly increasing recruitment to universities and higher secondary education). Recourse to the labour force surveys is a reasonable alternative, the various school inspectorates are a less helpful source of data.

The second, and more important problem is a reluctance, especially of the elder age cohort with elementary or less education to answer telephone surveys (regarding social and political themes). This distortion is present in all surveys in Italy, stronger in telephone surveys than face to face surveys, least in ISTAT surveys where there exists, in theory, an obligation to respond. The problem can only be solved by special measures in the sample design (see below).

Some final comments are in order. The actual grouping of study titles tended to underestimate somewhat the younger respondents with low education, not so much in terms of the presence of the quotum, but for the division between elementary and lower secondary education within the quotum.

The reason for the odd split in study titles by age is related to the development over time of what was considered, by law, obligatory education and what was further education.. It also facilitated, up to a certain extent, the filling of quota (see below for more detail). In table 2.2 some details about distortion of the day be day samples and the panel (see below) for education are given.
The sample was also monitored in more detail for the age - sex distinction by region; the age groups distinguished were 18-24 years of age, 25 to 34 years, and so on by decade till over 75 years of age. For this population data are readily available (but less so for the electorate; but with a largely stable population of Italians, this makes little difference).
From the beginning there were problems with the quota of lower educated respondents . The contact procedure was changed after three days as follows, it was first asked whether someone of the appropriate age-education quota (compatible with gender) was available and willing to be interviewed, if not the interviewer proceeded asking whether the telephone respondent was willing (if still in the quota for that day), otherwise someone else filling a quota place sill open was chosen. From spot checks in the telephone room it is not clear that this, rather heavy, procedure was actually followed all the time (cf. Steve et.al. 2008). All respondents who completed an interview were asked whether they were willing to be interviewed again after the elections.
After the first week it was clear that this also led to an under-representation of (elderly) respondents with low education. The mechanism of the quota functioned in such a way that half an hour before closing time (22h00) filling places by age-education-gender quota was stopped while maintaining age-gender quota, and respondents were selected according to this modified scheme. The alternative was to have a sample of less than 200 for that day, without obtaining (many) more interviews in the underrepresented quota . The procedure is, in general, known as 'opening up the quota'. It also occurs in longer telephone surveys not on a day be day base, but at the end of the survey. Similar effects can be found in face to face surveys.
In a meeting, held five days after beginning the interviews, the problem was noted and an experiment was held. For Tuesday 8 march in the morning a specific quotum of the 'missing respondents' was made, 45 respondents were obtained by twelve interviewers during three morning hours (10 to 13), and one hour in the afternoon (16-17), mainly elderly - which is also the quotum with the largest discrepancy. This showed that by 'over-sampling' a part of the missing quota could be recovered, but at a relevant cost; in terms of interviewer time finding these respondents cost about twice as much as finding 'normal' respondents The Doxa decided together with ITANES that interviewing would be an hour longer (from Thursday 10 march), beginning at 16h00 instead of 17h00 (without extra cost) but that no further measures concerning 'over-sampling' would be taken. (Or, more precisely, could be made without additional costs not covered by the research budget) The extra hour was, see table 2.1, irrelevant with respect to correcting the educational distribution. The additional respondents of the experiment were not included in the sample.
The daily samples for education are distorted in similar ways; The chi square test of independence of education and day it is 72.2 for 117 degrees of freedom. There is therefore no reason to think that the differences between daily samples are systematic, one can , from this point of view, see the daily samples as realizations from a population (which is not the full electorate).

***Table 2.2. distortion by education in % of total sample by day and panel***

| Date | Day | N | None/elem | low sec | high sec | University |
|---|---|---|---|---|---|---|
| | quota | | 27,2 | 38,1 | 26,0 | 8,7 |
| 28-feb | 1 | 200 | 24,0 | 35,0 | 30,5 | 10,5 |
| 01-mar | 2 | 201 | 22,4 | 35,8 | 29,9 | 11,9 |
| 02-mar | 3 | 202 | 21,8 | 41,6 | 22,3 | 14,4 |
| 03-mar | 4 | 202 | 20,8 | 38,6 | 25,2 | 15,3 |
| 04-mar | 5 | 200 | 21,5 | 40,5 | 24,5 | 13,5 |
| 05-mar | 6 | 201 | 17,9 | 41,8 | 29,4 | 10,9 |
| 06-mar | 7 | 201 | 23,9 | 39,3 | 23,9 | 12,9 |
| 07-mar | 8 | 201 | 22,9 | 39,3 | 25,9 | 11,9 |
| 08-mar | 9 | 200 | 22,5 | 37,0 | 29,0 | 11,5 |
| 09-mar | 10 | 200 | 23,0 | 38,0 | 26,5 | 12,5 |
| 10-mar | 11 | 200 | 19,0 | 40,0 | 26,5 | 14,5 |
| 11-mar | 12 | 201 | 22,9 | 35,3 | 27,9 | 13,9 |
| 12-mar | 13 | 203 | 19,7 | 34,0 | 29,6 | 16,7 |
| 13-mar | 14 | 202 | 24,8 | 32,2 | 33,7 | 9,4 |
| 14-mar | 15 | 201 | 22,9 | 39,3 | 27,4 | 10,4 |
| 15-mar | 16 | 190 | 22,1 | 36,8 | 27,9 | 13,2 |
| 16-mar | 17 | 210 | 20,0 | 39,5 | 28,1 | 12,4 |
| 17-mar | 18 | 200 | 23,5 | 39,0 | 23,0 | 14,5 |
| 18-mar | 19 | 200 | 21,5 | 34,5 | 27,0 | 17,0 |
| 19-mar | 20 | 203 | 22,7 | 32,0 | 28,1 | 17,2 |
| 20-mar | 21 | 200 | 26,0 | 36,0 | 27,5 | 10,5 |
| 21-mar | 22 | 201 | 20,9 | 37,8 | 26,4 | 14,9 |
| 22-mar | 23 | 202 | 19,3 | 39,6 | 31,7 | 9,4 |
| 23-mar | 24 | 201 | 20,4 | 37,8 | 26,9 | 14,9 |
| 24-mar | 25 | 204 | 21,1 | 37,3 | 28,4 | 13,2 |
| 25-mar | 26 | 202 | 20,3 | 36,6 | 28,2 | 14,9 |
| 26-mar | 27 | 203 | 20,7 | 37,4 | 25,1 | 16,7 |
| 27-mar | 28 | 200 | 21,0 | 38,0 | 28,0 | 13,0 |
| 28-mar | 29 | 201 | 21,9 | 39,8 | 26,4 | 11,9 |
| 29-mar | 30 | 201 | 20,4 | 38,3 | 32,3 | 10,9 |
| 30-mar | 31 | 201 | 18,9 | 38,3 | 30,8 | 13,9 |
| 31-mar | 32 | 201 | 19,9 | 37,8 | 28,4 | 13,9 |
| 01-apr | 33 | 201 | 24,4 | 32,3 | 29,4 | 13,9 |
| 02-apr | 34 | 200 | 21,0 | 36,0 | 30,5 | 12,5 |
| 03-apr | 35 | 202 | 20,3 | 34,2 | 31,7 | 13,9 |
| 04-apr | 36 | 200 | 24,0 | 31,5 | 32,0 | 12,5 |
| 05-apr | 37 | 202 | 20,8 | 36,6 | 30,7 | 11,9 |
| 06-apr | 38 | 202 | 20,3 | 38,6 | 25,2 | 15,8 |
| 07-apr | 39 | 202 | 24,3 | 37,1 | 28,2 | 10,4 |
| 08-apr | 40 | 200 | 22,5 | 40,5 | 25,0 | 12,0 |
| Mean | | 8044 | 21,6 | 37,2 | 28,0 | 13,2 |
| Post election | mean | 4000 | 21,4 | 39,7 | 27,3 | 11,6 |

***Table 2.3. distortions by work and non work day by day and panel in percent of total***

| Date | Day | quota | N | Dirig * | Indep 13,1 | * | Wh coll 17,8 | Working class 14,9 | Tot. Occ. 45.8 | Stu-dent 6,5 | house wife 16.9 | Pen-sion. 24.3 | Other 6,4 | Non occ 54.1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28-feb | 1 | | 200 | 1,5 | 5,0 | | 26,5 | 9,5 | 42,5 | 9,5 | 14,0 | 28,5 | 5,5 | 57,5 |
| 01-mar | 2 | | 201 | 1,0 | 7,0 | | 25,4 | 12,4 | 45,8 | 10,9 | 11,4 | 26,9 | 5,0 | 54,2 |
| 02-mar | 3 | | 202 | 3,0 | 8,4 | | 22,3 | 11,9 | 45,5 | 10,9 | 16,3 | 22,8 | 4,9 | 54,5 |
| 03-mar | 4 | | 202 | 2,5 | 8,9 | | 28,2 | 9,4 | 49,7 | 8,4 | 12,4 | 24,3 | 5,9 | 51,0 |
| 04-mar | 5 | | 200 | 3,5 | 9,5 | | 19,5 | 14,0 | 46,5 | 8,0 | 14,0 | 27,5 | 4,0 | 53,5 |
| 05-mar | 6 | | 201 | 3,5 | 13,9 | | 28,4 | 11,9 | 57,7 | 5,0 | 9,0 | 24,4 | 4,0 | 42,3 |
| 06-mar | 7 | | 201 | 2,5 | 10,9 | | 19,9 | 9,5 | 42,8 | 6,5 | 16,9 | 28,9 | 5,0 | 57,5 |
| 07-mar | 8 | | 201 | 1,5 | 9,5 | | 24,4 | 10,4 | 45,8 | 7,5 | 13,9 | 25,9 | 7,0 | 54,2 |
| 08-mar | 9 | | 200 | 1,0 | 12,0 | | 21,5 | 15,5 | 50,0 | 6,5 | 15,0 | 24,0 | 4,5 | 50.0 |
| 09-mar | 10 | | 200 | 1,5 | 10,0 | | 27,5 | 11,5 | 50,5 | 6,0 | 14,5 | 23,5 | 5,5 | 49,5 |
| 10-mar | 11 | | 200 | 2,5 | 7,5 | | 28,0 | 14,5 | 52,5 | 9,0 | 13,0 | 22,0 | 3,5 | 47,5 |
| 11-mar | 12 | | 201 | 6,0 | 10,0 | | 24,9 | 14,4 | 55,2 | 6,0 | 10,9 | 23,4 | 4,5 | 44,8 |
| 12-mar | 13 | | 203 | 3,4 | 11,3 | | 26,6 | 9,4 | 50,7 | 3,9 | 14,8 | 24,6 | 5,9 | 49,3 |
| 13-mar | 14 | | 202 | 2,5 | 8,4 | | 20,8 | 10,9 | 42,6 | 7,9 | 16,8 | 25,2 | 7,4 | 57,4 |
| 14-mar | 15 | | 201 | ,5 | 6,0 | | 18,4 | 12,4 | 37,3 | 9,5 | 21,9 | 25,9 | 5,5 | 62,7 |
| 15-mar | 16 | | 190 | 2,1 | 14,2 | | 23,2 | 7,4 | 46,8 | 7,9 | 13,7 | 24,7 | 6,8 | 53,2 |
| 16-mar | 17 | | 210 | 2,4 | 10,5 | | 25,7 | 8,6 | 47,1 | 8,6 | 16,7 | 22,9 | 4,8 | 52,9 |
| 17-mar | 18 | | 200 | 3,5 | 12,0 | | 28,0 | 12,0 | 55,5 | 5,5 | 11,0 | 22,5 | 5,5 | 44,5 |
| 18-mar | 19 | | 200 | 6,0 | 8,5 | | 22,5 | 11,5 | 48,5 | 7,5 | 13,5 | 23,5 | 7,0 | 51,5 |
| 19-mar | 20 | | 203 | 1,5 | 14,8 | | 24,1 | 13,3 | 53,7 | 5,4 | 8,9 | 25,6 | 6,4 | 46,3 |
| 20-mar | 21 | | 200 | 2,0 | 11,0 | | 25,5 | 12,0 | 50,5 | 2,5 | 16,0 | 25,5 | 5,5 | 49,5 |
| 21-mar | 22 | | 201 | 3,5 | 10,9 | | 27,4 | 10,9 | 52,7 | 6,0 | 10,4 | 25,9 | 5,0 | 47,3 |
| 22-mar | 23 | | 202 | 4,0 | 6,4 | | 30,7 | 9,9 | 51,0 | 9,4 | 12,4 | 21,3 | 5,9 | 49,0 |
| 23-mar | 24 | | 201 | 3,0 | 10,4 | | 23,9 | 11,4 | 49,8 | 8,0 | 16,9 | 21,9 | 4,5 | 51,2 |
| 24-mar | 25 | | 204 | 2,0 | 8,3 | | 25,5 | 11,3 | 47,1 | 7,4 | 12,7 | 26,5 | 6,4 | 52,9 |
| 25-mar | 26 | | 202 | 2,5 | 10,4 | | 32,7 | 7,4 | 53,0 | 4,5 | 13,9 | 23,3 | 5,4 | 47,0 |
| 26-mar | 27 | | 203 | 5,4 | 13,8 | | 23,2 | 12,8 | 55,2 | 5,4 | 13,8 | 20,7 | 4,9 | 44,8 |
| 27-mar | 28 | | 200 | 3,5 | 8,0 | | 25,0 | 10,5 | 47,0 | 8,0 | 13,5 | 27,0 | 4,5 | 53,0 |
| 28-mar | 29 | | 201 | 3,0 | 7,5 | | 25,4 | 10,4 | 46,3 | 5,0 | 15,4 | 23,9 | 9,5 | 53,7 |
| 29-mar | 30 | | 201 | 2,5 | 9,0 | | 26,4 | 9,5 | 47,3 | 10,4 | 14,4 | 22,4 | 5,5 | 52,7 |
| 30-mar | 31 | | 201 | 2,0 | 6,0 | | 26,9 | 12,9 | 47,8 | 10,4 | 10,4 | 26,4 | 5,0 | 52,2 |
| 31-mar | 32 | | 201 | 5,0 | 7,0 | | 27,4 | 10,0 | 49,3 | 9,5 | 10,9 | 26,4 | 4,0 | 50,7 |
| 01-apr | 33 | | 201 | 3,0 | 10,0 | | 27,4 | 10,4 | 50,7 | 6,0 | 15,4 | 23,4 | 4,5 | 49,3 |
| 02-apr | 34 | | 200 | 4,0 | 11,0 | | 25,0 | 12,0 | 52,0 | 10,0 | 15,0 | 20,0 | 3,0 | 48,0 |
| 03-apr | 35 | | 202 | 3,5 | 9,9 | | 26,2 | 12,9 | 52,5 | 6,9 | 11,9 | 24,8 | 4,0 | 47,5 |
| 04-apr | 36 | | 200 | 2,5 | 13,0 | | 26,0 | 11,5 | 53,0 | 7,5 | 14,5 | 22,0 | 3,0 | 47,0 |
| 05-apr | 37 | | 202 | ,0 | 6,4 | | 27,7 | 11,4 | 45,5 | 5,9 | 16,3 | 26,2 | 5,9 | 54,5 |
| 06-apr | 38 | | 202 | 6,9 | 5,9 | | 19,8 | 14,4 | 47,0 | 6,9 | 14,9 | 23,8 | 7,4 | 53,0 |
| 07-apr | 39 | | 202 | 3,0 | 10,9 | | 20,8 | 13,4 | 48,0 | 7,4 | 14,4 | 27,2 | 3,0 | 52,0 |
| 08-apr | 40 | | 200 | 4,0 | 11,5 | | 23,5 | 12,5 | 51,5 | 9,5 | 13,0 | 22,0 | 4,0 | 48,5 |
| Mean | | | 8044 | 2,9 | 9,6 | | 25,0 | 11,4 | 49.1 | 7,4 | 13,9 | 24,4 | 5,2 | 50.9 |
| Post election | mean | | 4000 | 2,8 | 9,2 | | 22,3 | 13,0 | 47.3 | 8,6 | 15,2 | 23,3 | 5,7 | 52.7 |

* the distortion of wh coll includes dirig Wh coll includes impiegati of all types.

In table 2.2 only the educational data are presented, but results are similar for the age-education quota.

Monitoring was also done for employment, using a large scale media use survey just run by the Doxa, the firm which held the interviews. This facilitated comparisons in terms of definitions and occupational titles for sample checking, but with hindsight it would have been preferable to use the labour force surveys (Forze Lavoro) since these are publicly accessible and which have fairly precise correspondences with the scientific classifications used in most Italian occupation and stratification research. (de Lillo Schizzerotto 1985; Pisati 2010; Bellucci 2001,2002; Ballarino, Schadee, Vezzoni 2009).In table 2.3 one finds one effect of this, the precise distortions for certain kinds of work could not be reconstructed in a sensible  Moreover, while the distortions for education were such that an intervention was seriously considered, though if it had worked out it would have notably complicated the analysis of the data, we also thought that changes of procedure during a RCS should in general be avoided, precisely because it notably complicates later analysis. These are judgment calls, in practice the experience of the researcher is used. The problem is not the reliance on such professional and technical experience, but the undocumented nature of such a process, and the very limited amount of work done in checking such judgments.  As table 2.3 shows there are some systematic distortions (over- representation of white and pink collar workers, under-representation of industrial workers and self employed workers, under-representation of housewives for example, with a final effect of over-representing the percentage of the electorate which works) but these were not such that it was felt necessary to intervene. In the reweighting of the daily samples these categories were not used.
More relevantly, for the arguments made here, tests for independence of this variable by day are non significant with a value of 283 with 273 df (p =.33); if only the division work- not working is looked at the independence test has chi square 53.2 for 39 df (p=,065) Again the daily samples can be seen as realizations of random samples from a population somewhat diverse from the electorate, but not different from day to day. For the weighted data, and the weighting did not include this monitoring variable, the independence test gives a chi square value of 342, which with 273 df (p=,003) is not entirely satisfactory. The conclusion from this is that in general the daily samples can be compared with one another, within the limits of the structural variables for which controls were made, and that weighting only partially improves the situation. (see below at the end of the section).

Re-interviewing for the panel took place a two to three weeks after the election and had no particular order in terms of the day of the first interview. Even though all respondents who were called a second time had agreed to be interviewed again a number of those refused. The refusals were relatively more frequent in those categories where respondents already had been under-represented.  The effect of this would have been to reinforce the selection which had already taken place in the first round. Instead, the following substitution strategy worked reasonably well. A respondent who refused to participate in the second interview was substituted by a respondent of the same stratum, same quotum and, moreover, of the same working status (not part of the original sampling plan, but available from first interview). In some quota this lead to calling all respondents who had been willing to be interviewed again, and even so some categories could not be filled out plainly. The consequence of this is that the panel sample has, in strata and quota presence more or less the same structure as the first wave, but not entirely. For education (table 2.2) the discrepancies were significant with a test for independence between panel membership and education chi square of 29,5 for 3 df (mainly the increase in the lower second category and the decrease of tertiary titles or ongoing studies) , for work the discrepancies were larger, the test for independence of work by panel membership gave a chi square of 74,3 with 7 df, though paradoxically this brought the overall distribution of the work categories in the panel closer to the target distribution than the distribution

of the whole sample. It is not entirely clear whether this effect is due to random fluctuation or an attempt to recover original quota and control variables by selecting whom to re-interview. In the original design this was a possible intention (see Note Doxa 12 april 2006 E.Brusati) though it is left unclear whether the original (quota and stratification distributions were to be recovered or the realized distributions in the RCS pre-electoral sample. The note is simply unclear on this; no formal decision had been taken yet (by ITANES Schadee and DOXA E. Brusati), and as has already been noted in some quota all possible candidates for a re-interview were used. But part of the original design for re-interviewing was changed (reasons of cost and time; undocumented telephone conversation ITANES Schadee - present M. Maraffi, DOXA W. Scarpino 19 april 2006; second day of re-interviews; 90% of these were concluded within a week but without precise description of any design followed), and it is not clear whether this part was maintained or was only relevant for the first few days of re-interviewing. A separate weighting was carried out for the panel, which can be used in those analyses where only post-electoral data are involved, which makes educational distributions comparable, but leaves the distribution of work-non work categories different. This may be relevant for analyses of the reported vote.

Interviewees were asked whether they were willing to be interviewed again 'a few weeks' after the elections (in practice re-interviewing began 10 days after the election, 90% of it was completed within ten days, all re-interviews were done exactly one month after the lection (8 may 2006)). As table 2.4 shows willingness declined by about 10 % over the course of the campaign (Chi square 74.6 for 5 df). Perhaps this is due to an increasing unwillingness in having to deal with politics as the campaign progressed ? (cf section 5 ). A similar effect (about half the size) is relevant for the fraction which actually was interviewed again, (chi square 22,8 for 5 df). However, the fraction of those willing to be interviewed again who actually were interviewed again ranged from 60 to 63% (chi square 3.4 5 df ) and showed no development over time (chi square 3,4 with 5 df).

***TABLE 2.4. willingness to participate in panel by week***

| Week | % willing | %in panel | %in panel as part of willing |
|---|---|---|---|
| day 1-5 | 87,6 | 53,8 | 61.5 |
| day 6-12 | 84,6 | 53,6 | 62.3 |
| day 13-19 | 78,5 | 49,3 | 62.8 |
| day 20-26 | 79,7 | 47,7 | 59.9 |
| day 27-33 | 77,1 | 47,9 | 62.2 |
| day 34-40 | 76,6 | 47,2 | 61.7 |
| mean | 80,3 | 49,7 | 62.3 |
| N | 8044 | 8044 | 6462 |

In general then, the respondents in the panel were somewhat more willing to be interviewed than those not included. Some further analyses showed had funds been available, that it would have been possible to interview between two thirds to 70% of the sample again (there is some guesstimating involved as some who were willing but were not contacted again in practice might have refused). If, however, all possible respondents had been interviewed again some for the educational distortions and some often work distortions of the overall sample would have been further emphasized (especially the distortion on the side of low education).
Analyses, similar to those for the full sample were done for the panel by day with respect to education and the work variable. The test of independence of education with day within the panel sample had a chi square value of 115,3 with 117df, and for work by day within the panel a chi square of 298,0 for 273 df (p=,14). The conclusion is that the daily samples within the panel can be seen as random realizations of the same population, though a slightly different one from the full

sample. (In general for panels Kasprzyk et.al. 1989, for recent techniques see below).

The daily samples were weighted for the stratification and quota variables by iterative proportional fitting (Stefan-Deming routine). In as far as units of different size were used for some of the fitting, more tables have to be used (alternating). The actual tables used were region by aggregate right vote (see above), zone by sex, education and age. No weightings were done for work variables or vote intentions or reported votes. It might be worthwhile to reweight by work variables as well, mainly for methodological purposes. Weighting by intended or realized votes is extremely risky, in general problematic and should be avoided except where the actual purpose is vote prediction before an election (but this is another theme altogether).
It is unclear whether the weighting actually improves the situation. As documented above, the daily samples can be considered daily realizations of random samples form the same population, while the panel population is slightly different, but again the daily samples can be seen as random realizations of samples from the same population. (cf Kalsbeek, Agans 2008; for complex surveys in general Skinner, Holt, Smith eds. 1989, ch 8 Smith on weighting; Chambers, Smith eds 2003) ; for more recent approaches see: in R: Lumley 2010; for Stata: Rabe-Hesketh, Skrondal 2004, 2005; for SAS: Verbeke, Molenberghe 2004).

There are some general observations to be made with respect to this analysis. As far as can be checked all electoral samples (probably all telephone samples, tout court) are biased in educational terms. Such biases are typically insufficiently documented. Most analyses deal with this either by ignoring the issue or using weights. More sophisticated techniques should be considered (see cited literature) which have in part been developed in the last two decades, and in part become easily available in the last decade. Here, for comparisons within the RCS data we consider the daily samples mainly in their unweighted form, with the caveat that this is not a representative (random) sample of the electorate. For analysing mechanisms we think in general that problems of representativeness should be dealt with after the mechanisms generating the data, causal or otherwise, have been identified (whether by analyses of surveys or experiments) and that the problem of the fraction of the population for which specific mechanisms are relevant should be dealt with afterwards (if at all).

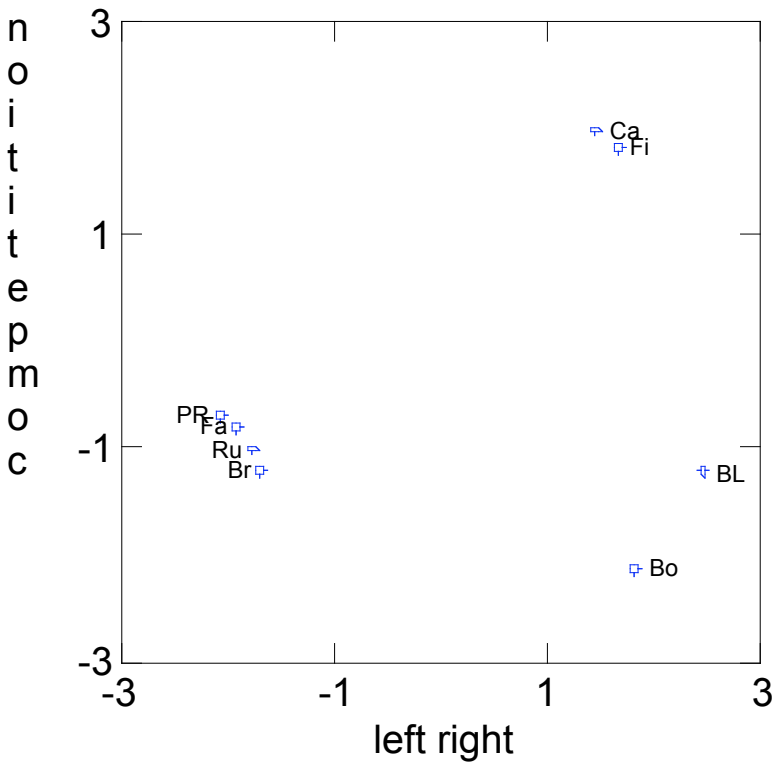
A final note. There are many missing data, or unsatisfactory data, in the survey. The main culprit are missing responses for vote intentions or reported votes, but in section 4 some other problems with the sympathy data are mentioned. In general Schadee now thinks this should be dealt with by multiple imputation (Rubin, 1987) or , for some specific purposes, EM procedures related to the models one is using, but this problem is not treated here any further in general. It would be helpful if files were available with such imputations already done, since many choices depend on a rather precise knowledge of the file and the data collection procedure, part of which may be undocumented (see above). Of course the file should also clearly indicate which data were originally missing, and the strategies followed in the imputation procedures. This only solves part of the problems since vote data should probably not be imputed at all ; the discussion on this is, however, open.

### *3. Unfolding sympathy scores.*

This section treats the sympathy as ordinal; the degree of sympathy is relative to other values for the same individual. The analyses assume there is a spatial configuration of points, representing leaders or parties and coalitions, and the respondents are represented by points as well. The rule linking the two sets of points is that the closer a respondent is to a point representing a leader (party, coalition) the higher the sympathy score. Where scores are equal this is supposed to be due to the roughness of the measure, and for the same score different distances between the respondent and the

leaders (parties, coalitions) are allowed. Otherwise ordering of distances and (lack of) sympathy should be maintained.. The technique is known as unfolding (Coombs 1964), the program version used is ALSCAL (Schiffman et.al 1981 for a survey of various programs; cf Coxon 1982; Cox, Cox 1994). Cases with missing data have little or no influence on the resulting configuration of leaders (parties, coalitions), though for analyses of the positions of individual points, individuals with many missing responses should be removed. (cf Schadee 2010 were this was not done)
Some hypotheses about the results can be formulated. Firstly, the main ideological dimension for discussing Italian politics is the left right dimension, it may be expected to find such a dimension in solutions for both leaders and parties (coalitions). However, the elections of 2006 were held under an electoral law, introduced a few months before by the Berlusconi government (also known as the Porcellum) in which voters could not express preferences for candidates, but could only vote parties, or, under the symbol of the party (coalition), for its leader. Parties forming a coalition with other parties before the election, had their votes summed, and the majority coalition got premium additional seats in the second chamber so as to have an absolute majority. This makes it plausible that voters perceived two blocks of parties, one for each coalition. These considerations also hold,in part, for leaders, but while for parties there is a well known standard left right order, a social representation (refs ), this is less clear for leaders. In addition for both parties and leaders some voters have prejudices of the form : 'I would never vote for this politician (party)' making breaks in the left right ordering. Finally, leaders are typically present for a long time in Italian politics, so great changes in sympathy scores over the campaign are unlikely. For parties something of the same holds, but the various coalition procedures, induced by the new law, have made this less clear. On the other hand, we hypothesize (see section 5 however) that parties are more directly linked to the left right dimension than leaders, which should add stability to the unfoldings.
Concluding these considerations, we opted for separate solutions for parties and leaders in two dimensions where differences on the second dimension allowed a partial keeping track of exclusions not based on the left right ordering made by voters. Separate unfoldings were made for each week (the first ‘week’ with only five days see table 2.4) to check whether there were changes by week. Solutions for the sympathy scores after the elections were made, for space limits of the program used, a thousand at a time.
It is easier to discuss the leadership data first. Fits in general were acceptable (SStress between .04 and .05, Stress between ,05 and ,08. These are two measures of badness of fit, their size is acceptable. Also RSQ, which is the R squared correlation between distances and 'lack of preference' (for each respondent and then averaged) was above .95 in these solutions. Inspection of the fit of individual respondents for stress and RSQ showed no cases with substantial lack of fit. The solutions were essentially the same both in the 6 weeks before the election as well as after the election. Since solutions are not affected by reflections of dimensions (rotations in general), or by adding (subtracting) a constant, each solution was oriented in such a way that left leaders were indeed on the left half of the diagram; in all solutions the first dimension was recognizable as a left-right dimension. The second dimension it was oriented in such a way that Casini (CDU) had a positive coordinate on the second axis. The solution was checked by comparing it with unfolding the answers in the face to face panel (ITANES 2006) to the question how the respondent evaluated the politics (attività politica - political activity) of the leader. (1337 respondents). Here too before and after the election solutions were similar, fits were comparable to those of the RCS data.

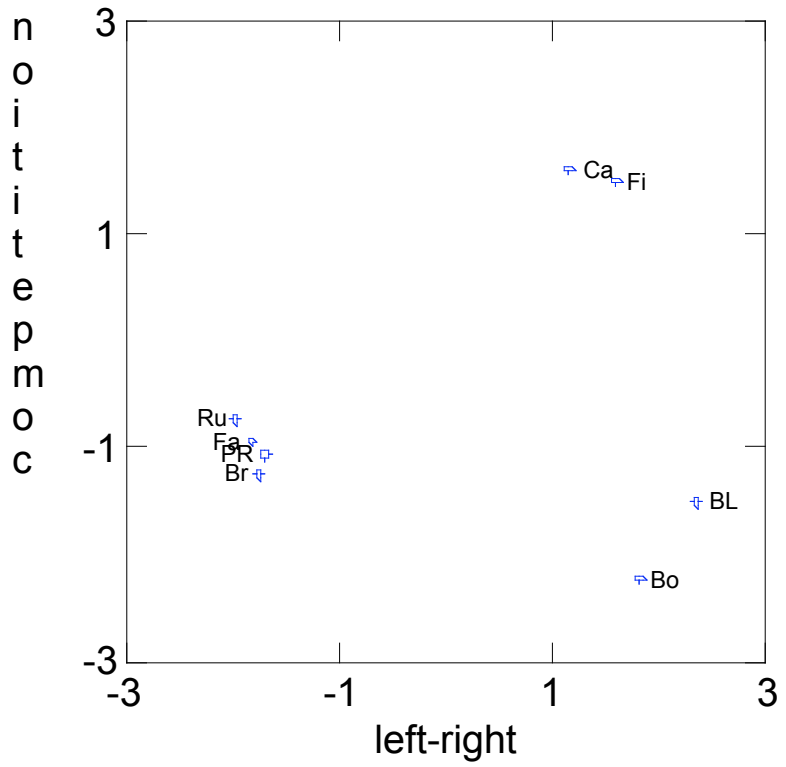
***Diagram 3.1 unfolding leaders sympathy data , Itanes RCS data***




So these two solutions were put together as well. Diagrams 3.1 above gives the solution for sympathy scores in the RCS data, diagram 3.2 the solution for the ITANES panel data.
A note must be made about the dimension called left right. The RCS data contain left right self-placement, but not the individual party placements.. The panel data contain such questions . Using the mean placement of the party (coalition) in the ITANES panel of which the leader is a leader , with Berlusconi given the mean of the position of CdL and FI, the squared correlation of the left right position on the axis of the unfolding with the left right position of the leaders from the panel data = .89. (cf . table 3.1) This certainly justifies calling it a left right dimension.
The left leaders form a small cluster, this may be interpreted by noting that in the five years before they had been in the opposition. The right leaders have similar positions on what has been called the left-right axis, but quite different positions on the axis called competition. In single solutions Casini (CDU) and Fini (AN) are less close together than in this mean solution. A further note should also be made on this 'left-right' axis. It is not pure left right, but a mixture of left right and leadership of the relative coalitions. This is quite clear since Prodi is the most 'left' leader, and Berlusconi the most 'right' leader. Part of the clustering can be accounted for recalling the electoral law which strongly favoured the forming of two blocks (coalitions). (cf Baldassarri, Schadee 2004)
A similar solution is obtained from the panel data (ITANES 2006) where the question was phrased differently : how the respondent judged the politics (political activity) of the leader.. Using the panel data for party left right position as described above, the squared correlation with leaders position on the unfolding left right axis was .90. (cf table 3.1). The small differences in the ordering

of the 'left' leaders as compared with the solution of diagram 3.1 (Prodi in diagram 3.2 is not the furthest on the left) should probably not be given too much importance.

**Diagram 3.2 Unfolding leaders 'political activity' (ITANES 2006 Panel)**




However, these changes among the ordering of the 'left' leaders, as well as the differences between these orderings and a straight left-right ordering should be investigated further, so as to see how the entwining of leadership, party and left-right structuring actually works (see also section 5) but we did not arrive at a satisfactory understanding. The RCS data do not contain much more information on feelings for leaders or parties, or the degree to which left-right positioning functions as a form of 'party identitity'. , (Klingemann 1972 ?; cf Schadee, Vezzoni 2011 forthcoming). The left right ordering appears as kind of social representation (Moscovici 1961, Jodelet 1989, Guimelli 1994.

For the parties a convenient hypothesis is to assume a similar solution as for the leaders, with the left-right dimension more clearly defined. As a side remark one notes that it is clear what is meant by 'sympathy' for a leader, but this is not quite as clear for parties. It is easiest to begin with the panel data where the party utility or propensity to vote question (how likely are you to ever vote this party ?) of which one interpretation (van der Eyk, verbal, Edinburgh 2003 ECPR conference) is 'current party preference'. In the unfolding the coalitions, Unione (left) and Casa della Libertà (right) were included. For ITANES panel data there were no substantive differences between the pre- and post election unfoldings, the mean of the coordinates is presented in diagram 3.3. One can recognize the configuration. The CDU (Casini) and AN (Fini) have moved somewhat more apart, and the Rifondazione Communista (Bertinotti) has become separate along the 'competition' dimension from the other 'left' parties, which are now very tightly clustered. This configuration is

comprehensible given the discussion before and after the election about the reliability of the RC support for the Prodi government. The squared correlation of this PTV unfolding of the ITANES panel data with the mean left-right position of the parties is .94, higher than for leaders.

*Diagram 3.3. Unfolding propensity to vote (ITANES 2006 Panel)*

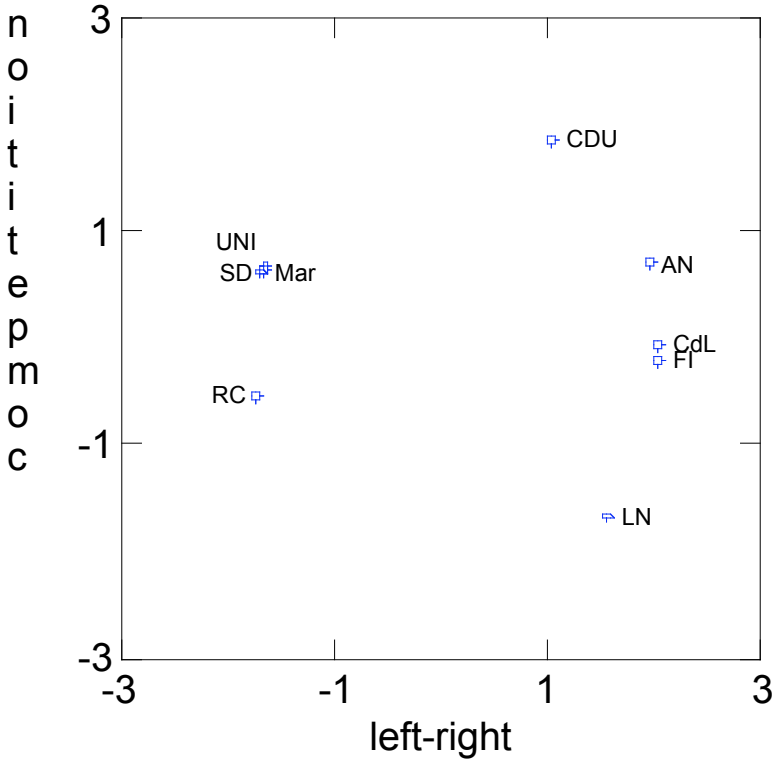



*Diagram 3.4 Unfolding party sympathy post election, RCS*

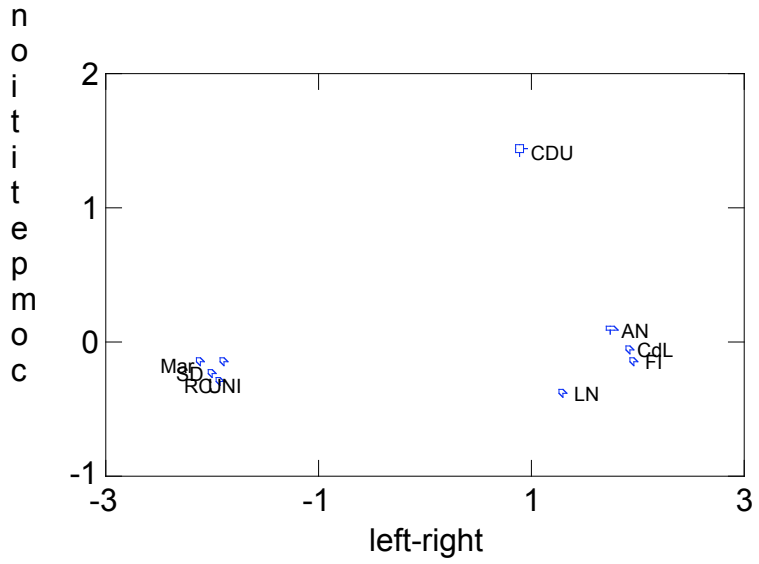


*Diagram 3.5 Unfolding party sympathy pre election, RCS*

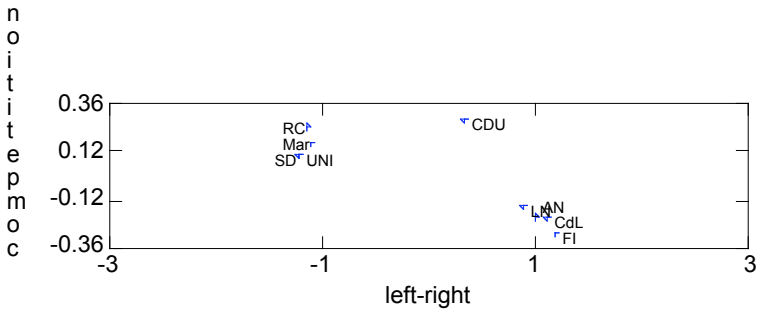



Diagram 3.4 shows the unfolding for the party sympathy data. Here the clusters formed by the coalitions are quite compact and the range of the second dimension is (much) smaller than for the propensity to vote question. In some ways diagram 3.4 resembles diagram 3.1 more than diagram 3.3. The squared correlation of left right party position in the panel after the election and the left-right axis of the post-election unfolding of the party sympathy data is .93. (cf table 3.1)
The surprise comes in unfolding the party sympathy scores for the pre-election data (diagram 3.5). From week to week configurations change little, and there is no development in the direction of diagram 3.4 expanding the dimensions. In part this is arbitrary since solutions maintain their fit properties multiplying all dimensions by the same constant, but the relative variance of point coordinates on dimensions can not be changed without changing the model underlying the solution. And while the previous party unfoldings were comparable to the unfoldings for leaders, here the configuration is contracted, and this contraction is more drastic for the vertical dimension (which would be a third of its actual size if really drawn to scale) . But the fits of these solutions improve SStress is about .02, (as against .03 to .05 for leader unfoldings), stress about .03, while RSQ remains about equal (above .95). In practice the solution is one dimensional, two clusters for the coalitions and the CDU somewhere in the middle. The correlation of the main axis of this unfolding with the mean left right position of parties in the ITANES panel data is .96.
Aconclusion may be drawn from this. The answers to the sympathy question for parties in the pre-election period are based on the two coalitions, induced by the electoral law (Baldassarri, Schadee 2004, 2005). After the election the party sympathy unfolding is more similar to the unfoldings for leaders. This suggests the sympathy question is vague for parties, especially in the pre-election period, and the propensity to vote question should be preferred.

*TABLE 3.1 Mean party left right position ITANES 2006 panel*

| PARTIES | pre election | | N | post election | | N |
|---|---|---|---|---|---|---|
| | mean | sd | | mean | sd | |
| Rifondazione | 1.6 | 1.2 | 1264 | 1,6 | 1,1 | 1300 |
| Dem. Sin. | 2.6 | 1.2 | 1264 | 2.8 | 1.2 | 1301 |
| Unione | 3.1 | 1.5 | 1143 | 3.1 | 1.3 | 1302 |
| Margherita | 3.6 | 1.5 | 1239 | 3.7 | 1,3 | 1276 |
| UDC | 6.0 | 1.8 | 1157 | 6.4 | 1,6 | 1244 |
| Casa Liberta | 7.9 | 1.6 | 1240 | 7.9 | 1.5 | 1302 |
| FI | 8.1 | 1.6 | 1274 | 8.1 | 1.5 | 1305 |
| Lega Nord | 8.2 | 1.8 | 1206 | 8,2 | 1.7 | 1262 |
| AN | 8.6 | 1.7 | 1252 | 8.6 | 1.5 | 1295 |
| auto | 5.1 | 2.7 | 1121 | 5.05 | 2.7 | 1195 |

### *4. Sympathy for leaders and parties, means and a puzzle*

The questionnaire asked for parties (7 parties, 2 coalitions) and their leaders (8 leaders) whether the party (leader) was known, and if yes, the degree of sympathy the respondent felt for each of these parties and leaders on a scale from 1 (do not like at all) to 10 (like very much). The response Don't know, or won't tell (DKWT) was not suggested by the interviewer, but registered. Tables 4.1 and 4.2 give some of the relevant statistics.

***TABLE 4.1 Means sympathy parties (N pre election 8044, N post-election 4000 unweighted)***

| PARTY | Before election | | | | After election | | | | post-pre |
|---|---|---|---|---|---|---|---|---|---|
| | N : Unknown | DKWT | Mean | SD | N: Unknown | DKWT | Mean | SD | |
| RC | 240 | 252 | 4.3 | 2.4 | 64 | 51 | 4.9 | 2.4 | .6 |
| PDS | 408 | 274 | 5.0 | 2.4 | 108 | 61 | 5.5 | 2.3 | .5 |
| Margherita | 327 | 257 | 4.8 | 2.2 | 59 | 57 | 5.3 | 2.1 | .5 |
| Unione | 584 | 274 | 5.0 | 2.3 | 75 | 65 | 5.7 | 2.4 | .7 |
| CDU | 1222 | 291 | 4.5 | 2.2 | 317 | 87 | 5.1 | 2.0 | .6 |
| FI | 126 | 211 | 4.5 | 2.9 | 23 | 36 | 4.9 | 2.9 | .4 |
| CdL | 399 | 270 | 4.5 | 2.7 | 64 | 50 | 5.1 | 2.7 | .7 |
| AN | 222 | 247 | 4.9 | 2.6 | 53 | 55 | 5.4 | 2.5 | .5 |
| LN | 205 | 242 | 3.3 | 2.4 | 55 | 60 | 3.8 | 2.4 | .5 |

***TABLE 4.2 means sympathy leaders (N pre election 8044, N post-election 4000 unweighted)***

| LEADER | Before election | | | | After election | | | | post-pre |
|---|---|---|---|---|---|---|---|---|---|
| | N : Unknown | DKWT | Mean | SD | N: Unknown | DKWT | Mean | SD | |
| Bertinotti | 262 | 169 | 4.9 | 2.5 | 50 | 50 | 5.5 | 2.4 | .6 |
| Fassino | 370 | 183 | 5.2 | 2.5 | 59 | 89 | 5.6 | 2.4 | .4 |
| Rutelli | 177 | 155 | 5.0 | 2.3 | 54 | 40 | 5.4 | 2.1 | .4 |
| Prodi | 81 | 151 | 4.9 | 2.7 | 13 | 35 | 5.5 | 2.7 | .6 |
| Casini | 342 | 189 | 5.4 | 2.4 | 85 | 51 | 5.8 | 2.2 | .4 |
| Berlusconi | 44 | 148 | 4.5 | 3.0 | 7 | 13 | 4.9 | 3.0 | .4 |
| Fini | 119 | 142 | 5.8 | 2.6 | 24 | 31 | 6.1 | 2.4 | .3 |
| Bossi | 98 | 173 | 3.3 | 2.4 | 22 | 61 | 3.8 | 2.4 | .5 |

The tables show that after the election the number of unknown and DKWT responses became less numerous, in accord with classical campaign theory. However, there is no evidence from the data that this change occurred during the campaign. The analysis is as follows: unknown and DKWT were combined and contrasted with fraction where a sympathy score was given. For the leaders and parties the table ‘day by valid answer or unknown, DKWT’, was tested for independence by chi square tests in general and for the part of the this total chi square which could be accounted for by a linear development over time (see Table 4.3). The tests suggest that some changes went on, but the linear association test shows that only for some cases this was a linear development, Checking the direction of the development over time, however, made clear that for all parties and leaders with a significant linear effect, it was due to ‘unknown /DKWT’ increasing over time. Specifically, in the first 'week' (five days) of interviewing the recognition rate or DKWT was less than in the other weeks. Further testing is, for the purpose at hand, not especially important. We suggest that the effect shows an increasing reluctance, whether an increasing reticence or a growing irritation with (politics during) the campaign (cf below, Segatti, Schadee 2005; Hibbing, Theiss-Morse 2002), to answer questions involving judgments on parties and leaders in the last month of the campaign, finding the alternative, an actual increase, highly implausible by any reason we can think of…

*TABLE 4.3 chi square tests changes valid answers sympathy by day parties leaders (unweighted)*

| LEADER | chi* | p | chi ** linear | p*** | PARTY | chi* | p | chi ** linear | p*** |
|---|---|---|---|---|---|---|---|---|---|
| Bertinotti | 43,2 | ,30 | ,1 | ns | RC | 61,0 | ,014 | 9,4 | ,002 |
| Fassino | 63,0 | ,009 | ,9 | ns | DS | 58,1 | ,025 | ,1 | ns |
| Rutelli | 64,1 | ,007 | 9,3 | ,002 | Margh | 63,8 | ,007 | 5,3 | ,022 |
| Prodi | 63,5 | ,008 | 3,6 | ,08 | Unione | 25,3 | ns | ,8 | ns |
| Casini | 66,0 | ,004 | ,2 | ns | CDU | 44,3 | ,26 | ,4 | ns |
| Berlusconi | 81,1 | ,000 | 12,8 | ,000 | FI | 86,3 | ,000 | 16,7 | ,000 |
| | | | | | CdL | 38,1 | ns | ,8 | ns |
| Fini | 65,8 | ,005 | 2,8 | ,09 | AN | 71,2 | ,001 | 5,8 | ,020 |
| Bossi | 65,3 | ,005 | 10,6 | ,000 | LN | 68,2 | ,003 | 10,5 | ,001 |

* df 39 ; ** df =1 ; not significant, chi < df

A second point is that names of leaders are in general recognized more frequently than the name of parties. This is most obvious for the CDU but it is a general effect; in part this may be because party labels were somewhat changeable, but there is no further real evidence for this, and it contrasts with an aspect, already noted, of the new electoral law, to wit the major emphasis on parties.

But by far the most striking feature tables 4.1 and 4.2 is that the means of the sympathy scores after the election are about half a point higher for all leaders and for all parties, as shown in the columns post-pre. An obvious possibility, in line with general theory about campaigns and similar to the one dealt with for 'unknown/DKWT' is dealt with first. The effect may be a campaign effect: as voters get more information on leaders and parties, they give them higher sympathy scores. The effect can not be entirely limited to higher scores for the politicians or the party or coalition the respondent votes for, since in that case the standard deviation ought to increase, and there is no evidence of this in tables 4.1-2. However, if this hypothesis held one would expect the party and leader sympathy scores to increase as the campaign went on. Dividing the forty days for which the RCS has data in a first 'week' (Tuesday 28 February to Saturday 4 march inclusive) and five further weeks, each beginning on Sunday, the a sample size was 1006 respondents for the first 'week' and slightly over 1400 for the further five weeks. Table 4.4 gives the mean sympathy scores by week.

The table shows some changes going on during the campaign, but there is no evidence of systematic increase or decrease during the campaign (compare diagram 1.4: Berlusconi, Prodi). But for all leaders and parties the mean post-election sympathy scores are higher than mean sympathy scores during the weeks of the campaign (analysis by days gives some exceptions).

Before continuing with possible explanations some alternatives should be considered and ruled out. Firstly, one might ask whether these results change if data are weighted. The answer is no, though some numerical details change. The same question can be raised in considering only respondents in the panel, whether weighted or unweighted. Again, the answer is negative. Some further data problems may be relevant.. one might consider only respondents who give sympathy scores, for all parties, or all leaders , or both , or decide to limit the analyses under these conditions to only panel respondents. Again, the essential result, an increase after the election of about half a point remains unaffected by such changes. Finally, some respondents give the same sympathy score to all leaders (parties, coalitions). These are clearly empty responses, but again, the main result does not change if these are eliminated from the analyses. It would be otiose in the extreme to present variations on table 4.1, 4.2 and 4.4 under all these conditions (some are available on request), but the differences in mean sympathy scores before and after the election remains, as well as the lack of systematic development of means or standard deviation over time during the campaign. This stability is one of the reasons for suggesting multiple imputation for missing data would simplify analysis repeating them for each imputation, rather than checking various combinations of missing data.

*TABLE 4.4 Mean sympathy score by week for parties and leaders (RCS unweighted)*

| Means | Weeks before election | | | | | | MEAN | diff | linear | omo- |
|---|---|---|---|---|---|---|---|---|---|---|
| | six | five | four | three | two | one | TOTAL | sig | sig | sched. |
| **PARTIES** | | | | | | | | | | |
| RC | 4.3 | 4.4 | 4.4 | 4.3 | 4.3 | 4.2 | 4.3 | .10 | .01 | ,62 |
| PDS | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.8 | 5.0 | .08 | .046 | ,21 |
| Margherita | 4.8 | 4.8 | 4.9 | 4.9 | 4.8 | 4.6 | 4.7 | .001 | .09 | ,13 |
| Unione | 4.9 | 5.0 | 5.1 | 5.2 | 5.0 | 4.8 | 5.0 | .00 | .09 | ,90 |
| CDU | 4.5 | 4.6 | 4.6 | 4.4 | 4.4 | 4.3 | 4.5 | .00 | .00 | ,86 |
| FI | 4.4 | 4.6 | 4.5 | 4.4 | 4.4 | 4.4 | 4.5 | .25 | .11 | ,73 |
| CdL | 4.6 | 4.7 | 4.6 | 4.4 | 4.5 | 4.4 | 4.5 | .07 | .01 | ,59 |
| AN | 5.0 | 5.0 | 4.9 | 4.8 | 4.8 | 4.7 | 4.9 | .005 | .000 | ,07 |
| LN | 3.4 | 3.5 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | .03 | .008 | ,001 |
| **LEADERS** | | | | | | | | | | |
| Bertinotti | 5.0 | 5.2 | 5.0 | 4.9 | 4.9 | 4.7 | 4.9 | .00 | .00 | ,48 |
| Fassino | 5.2 | 5.1 | 5.2 | 5.3 | 5.2 | 5.0 | 5.2 | .13 | .21 | ,90 |
| Rutelli | 4.9 | 4.9 | 5.0 | 5.1 | 5.1 | 4.8 | 5.0 | .00 | .64 | ,41 |
| Prodi | 4.9 | 4.9 | 5.0 | 5.2 | 4.9 | 4.7 | 4.9 | .00 | .11 | ,42 |
| Casini | 5.4 | 5.5 | 5.4 | 5.3 | 5.4 | 5.3 | 5.4 | .40 | .13 | ,61 |
| Berlusconi | 4.5 | 4.6 | 4.6 | 4.4 | 4.4 | 4.5 | 4.5 | .25 | .17 | ,37 |
| Fini | 6.0 | 6.0 | 5.9 | 5.7 | 5.8 | 5.7 | 5.8 | .001 | .00 | ,59 |
| Bossi | 3.5 | 3.5 | 3.3 | 3.2 | 3.2 | 3.3 | 3.3 | .005 | .001 | ,02 |

However, one might make the following argument. As the campaign goes on some voters increase their sympathy for some leaders (parties) and diminish it for others. the effects on means are small because these processes partly cancel out, but in such processes the standard deviations should increase during the campaign. This process of adjustment during the campaign can also be taken in the other direction, as the voter decides on the party (coalition) or leader to vote for, the sympathy scores are brought in line with the vote (rationalization). In this case too the standard deviations should increase (slightly) over time, at least if decisions are made during the campaign. The column of omosch(edasticity) in table 4.4 shows the significance (p value) of the test of Levene for the differences in standard deviations (variances) of party and leader sympathy across weeks; apart from Bossi and the Lega Nord there are no significant effects. Inspection of the standard deviations for Bossi and the Lega Nord only showed a range of ,2 (overall value of sd : 2.4) for these, and the changes were not linear. We conclude there are no real changes in standard deviations during the weeks of the campaign and. one can refer to tables 4.1-2 for the values of standard deviations. In substantive terms there is no evidence of either adjustment or rationalization of sympathy scores during the campaign influencing sympathy scores.

There is another way to check this argument, which adds a useful detail. Since we are considering 8 leaders and 9 parties or coalitions, one can compute for each individual with full data, the standard deviations (variances) in the sympathy scores for leaders and parties. Again, tests whether these standard deviations of individual judgments changed over time led to the conclusion there was no significant change in the 6 weeks of the campaign ( p test leaders ,52; parties ,73). The detail that can be added is that it is also possible test whether the individual standard deviation of judgements on leaders and parties changes from before to after the election. The paired comparison test is significant, for both leaders and parties But the direction of change is interesting, the standard deviations in both cases diminish slightly (although significantly). Table 4.5 gives some of the details. Moreover , the squared correlations ( just above .5) between individual standard deviations shows a reasonable persistence in response behaviour with regard to variation in the sympathy scores for leaders and parties. If anything there is evidence for a (very small) decrease in variation of sympathy judgments after the election.

*TABLE 4.5 Individual standard deviation of sympathy scores before and after election (N=2808)*

| | Mean sd sympathy score before | after | score difference | t statistic (df 2807) | p | sq. correlation before - after |
|---|---|---|---|---|---|---|
| parties | 2,28 | 2,16 | ,12 | 8,7 | ,000 | ,55 |
| leaders | 2,46 | 2,30 | ,16 | 11,3 | ,000 | ,51 |

In what sense does this result differ from what was known from panel data before and after elections without RCS design ? In table 4.6 the means of the propensity to vote are given for the parties (cf table 4.1), while table 4.7 gives the means for the evaluation of political activity of leaders (cf table 4.2). The data come from the ITANES 2006 panel, already used in the unfoldings, and provide, as do tables 4.1-.2 some descriptions for the data used in the unfoldings. But the main point of the tables is that they lead to the same conclusions as the preceding analysis concerning the difference between before and after election scores, with the exception of Fini and Casini where the post election and pre election means are the same (Fini) or ,1 less (Casini). This may be either a random fluctuations, or a ceiling effect, as the means of Fini and Casini before the election are the highest of the means of all leaders. What is added by the SRC design is that the increase in mean score happens after the elections; it is not a gradual increase during the campaign, partially contradicting general campaign theory. Moreover, standard deviations hardly change before and after elections.

*TABLE 4.6 Means PTV parties (N 1377 unweighted ITANES panel 2006))*

| PARTY | Before election N : valid | Mean | SD | After election N: valid | Mean | SD | post-pre |
|---|---|---|---|---|---|---|---|
| RC | 1216 | 2,3 | 2,7 | 1232 | 3,1 | 2,9 | ,8 |
| PDS | 1169 | 3,1 | 2,8 | 1213 | 3,9 | 3,0 | ,8 |
| Margherita | 1232 | 3,2 | 2,9 | 1246 | 3,7 | 2,7 | ,5 |
| Unione | 1114 | 3,3 | 2,7 | 1157 | 4,2 | 3,1 | ,9 |
| CDU | 1207 | 2,8 | 2,6 | 1245 | 3,6 | 2,7 | ,8 |
| FI | 1188 | 2,8 | 3,1 | 1198 | 3,1 | 3,2 | ,3 |
| CdL | 1158 | 2,8 | 3,1 | 1189 | 3,4 | 3,2 | ,6 |
| AN | 1203 | 3,0 | 3,0 | 1204 | 3,4 | 3,0 | ,4 |
| LN | 1269 | 1,7 | 2,4 | 1274 | 1,9 | 2,4 | ,2 |

*TABLE 4.7 means evaluation political activity of leaders*
*(N 1377, ITANES 2006 panel unweighted)*

| LEADER | Before election N : Valid | Mean | SD | After election N: valid | Mean | SD | post-pre |
|---|---|---|---|---|---|---|---|
| Bertinotti | 1236 | 3,8 | 2,6 | 1268 | 4,3 | 2,6 | ,5 |
| Fassino | 1195 | 4,1 | 2,5 | 1244 | 4,3 | 2,4 | ,2 |
| Rutelli | 1279 | 4,0 | 2,6 | 1275 | 4,5 | 2,1 | ,5 |
| Prodi | 1279 | 4,0 | 2,6 | 1304 | 4,2 | 2,6 | ,2 |
| Casini | 1222 | 4,7 | 2,2 | 1248 | 4,6 | 2,0 | -,1 |
| Berlusconi | 1318 | 3,5 | 3,1 | 1317 | 3,7 | 3,0 | ,2 |
| Fini | 1266 | 4,7 | 2,6 | 1278 | 4,7 | 2,5 | ,0 |
| Bossi | 1288 | 2,3 | 2,4 | 1302 | 2,5 | 2,4 | ,2 |

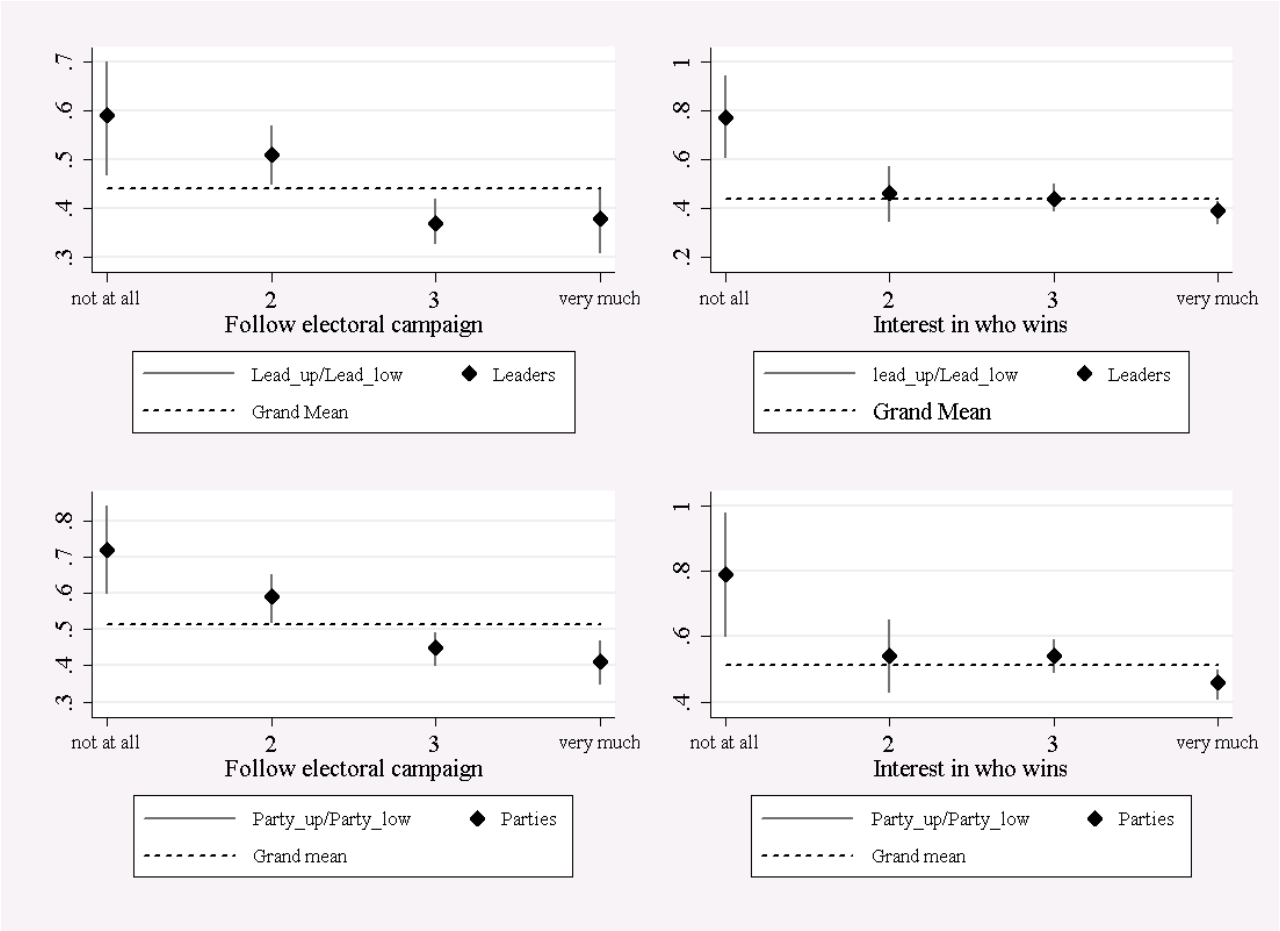
This is not the place to comment further on the differences between these variables and the sympathy variables, though, given the fairly similar sample designs some further work can be done on equating the different measures (Brennan, Kolen 2004; von Davier, Holland, Thayer 2004). We did not (yet) perform the extensive checking of these results taking account of missing or

unsatisfactory data, and weighting, we will report on this elsewhere.

What then accounts for the increase in sympathy scores, if not changes during the campaign.
A cluster analysis of mean and standard deviations in judgments showed that respondents with very low mean scores and very limited variance raised their score more (about 1.0 to 1.5 in the mean) then other respondents after the elections. In more analytical terms we suggest that these are more marginal members of the electorate, who were not interested in the campaign, or not interested in who would win the election. (diagram 4.1 presents these results) Further analyses (not presented in here) showed these voters as less involved in political discussions; not surprisingly they tend not to turnout or when they have voted they decided in the last days or even in the polling booth. Some of these voters appear then to remain uninvolved in the electoral campaign, or even to view it with a certain irritation. They begin the 40 days period with low sympathies towards all leaders and parties, and only after the election they change their minds a bit. The differences are, however, modest as diagram 4.1 shows for two of the indicators mentioned.

***Diagram 4.1 Mean difference between sympathy scores for leaders and parties before and after elections for levels of interest in campaign and in its political consequence***

Before election




After elections

## *5. A mixed model analysis for the effect of left right position on sympathy scores*

Let us summarize the analyses so far and draw a conclusion. All in all the data give no support for an effect during the campaign on the sympathy scores in particular. This does not mean there is no effect. One could guess that a leader or party which never appeared in the news, or obtained no antenna time on TV would loose in recognisability and might drop in sympathy score. In other words, what really drives change in sympathies might be a change in being recognised. Since the chance that in Italy as unknown candidate will enter the electoral arena as a leaders is very low, it might be that what the results are the consequence of long standing opinions and feelings towards leaders and parties by the electorate. It might therefore be no surprise that the RCS data do not point to strong effects over time. But so far we have not tried to account for sympathy scores of leaders and parties in general. Apart from detail, the unfolding analyses show the relevance of a left right structuring for sympathy scores, more so for parties then for leaders. We attempt to check this claim on the individual level. In all analyses, so far, there is an implicit assumption that vote intention (or reported actual vote) is associated with (higher) sympathy scores but this is now added, as an obvious third hypothesis. Finally we will explore whether we can be more explicit about the

relations between pre and post election sympathy scores.
It is tiresome to analyse separately for each leader or each party. Moreover, such analyses, of hypotheses of general effects regarding all parties or leaders, are at least inefficient, and arguably inappropriate in ignoring the interrelations between the various forms of the dependent variables. A possible approach is to stack the individual responses (sympathy scores for parties and leaders before and after the election) and perform analyses on the stacked data, considering an analysis on more levels. The first level is given by the individual responses, the second level are the individuals and the third level are the days. Originally we intended to include variables for the days in the form of antenna time for specific events, or for leaders in transmissions. However, preliminary analyses were not satisfactory, so at the level of day there are no further variables.
A general claim (hypothesis) then is that in multilevel mixed models the effect of day of interview is small. A second general claim (hypothesis) is that sympathy scores are, in part, structured by a left-right dimension, more so for the parties than for the leaders and thirdly that vote intention (or vote) have an effect on the sympathy score. Some other exploratory hypotheses, discussed below regard such changes in sympathy scores as occur after the actual vote.

Most of the variables in the stacked data set have already been discussed or are standard However, to deal with the claims about left-right structuring, two response variables were added to the stacked data. In the original RCS dataset the left right positions of the individuals, before and after the election, were asked but left right placements were not asked for leaders or parties (coalitions).. For parties the placement data of the ITANES 2006 panel (see table 3.1) were used. Party leaders were assigned the position of the party they led. For Prodi the position of the coalition (Unione) was used, for Berlusconi the mean of the mean position of FI and CdL. In this construction the RCS questions on self-right self-placement was in 5 categories and the party placement in the 2006 ITANES panel in 10 categories (standard question with card). Table 5.1 compares the left-right self-placements of the 2006 ITANES panel with those of the RCS panel before and after the election.. Table 3.1 (above) gives the mean party placements by the respondents of the Itanes 2006 panel before and after the elections. The left right distance of RCS respondents to parties and leaders were calculated as the absolute value of the difference between RCS self placement, and mean ITANES panel (party placement/2), before and after elections. More complicated linking and equating of these measures appeared out of place in this situation(cf Brennan, Kolen 2004; van Davier, Holland, Thayer 2004). It should be noted that this construction does not base the distances on perceived individual differences between party placements (leader placements) and self placements.

***Table 5.1 Self placement left-right scale RCS 2006, ITANES panel 2006***

| Placement | Panel % | | Rolling Cross Section Panel | | | |
|---|---|---|---|---|---|---|
| | before | after | before | after | before | after |
| 1 | 10.2 | 9.0 | | | | |
| 2 | 9.7 | 10.5 | 21.1 | 19.2 | 21.4 | 18.2 |
| 3 | 13.3 | 14.9 | | | | |
| 4 | 10.5 | 12.3 | 27.0 | 29.3 | 26.1 | 28.2 |
| 5 | 14.3 | 12.7 | | | | |
| 6 | 8.5 | 7.4 | 13.3 | 10.9 | 11.7 | 11.2 |
| 7 | 10.8 | 8.9 | | | | |
| 8 | 9.4 | 13.0 | 25.1 | 26.2 | 25.5 | 27.0 |
| 9 | 5.9 | 5.3 | | | | |
| 10 | 7.5 | 6.0 | 13.6 | 14.3 | 15.3 | 15.4 |
| N | (1121) | (1195) | (5886) | (3403) | (3053) | (3388) |
| MEAN | 5.12 | 5.05 | | | | |
| Correlation | .805 (N 1045) | | | | .866 (N 2888) | |

In practice the construction implies that the effect of computed individual left right distances on sympathy scores is expected to be negative: the greater the distance , the less the score. This is also what the interpretation of the first dimension of the unfoldings as a left-right dimension suggested. There are 7 parties and 2 coalitions, but only 8 leaders. To simplify matters only 8 individual responses were stacked, the sympathy scores for Casa della Libertà was left out.

The test of a limited effect of day of interview on leaders and parties sympathies, a left right structuring of these sympathies with a lesser effect of this for leaders was done in Stata (Rabe-Hesketh, Skrondal 2005) with two multilevel regression models for pre-election data:
xtmixed leadst1 voting intentions LR_distance1, || ResNr: Days, covariance(independent)
xtmixed partst1 voting intentions LR_distance1, || ResNr: Days, covariance(independent)
The equations are nearly self explanatory. Leadst1 is the general variable of sympathy for a leader, voting intention is obvious and has value of 0 in general, but 1 for the party or coalition the respondent intends to vote for. L(eft)-R(ight) distance1 is the left right distance constructed above.
Under the hypotheses in both models the variation of sympathy for leaders and party over the 40 days period should be small and there should be an effect of left right position before the elections. Under the second hypothesis the effect for the left right distance should be less extreme (the direction of the effect should be negative) for leader sympathy scores. Tables 5.2 and 5.3 give the results of the analysis. A note should be made about the option for the covariance between the estimate of the constant and the random effect by day. Here the default, independence, has been used. It would probably be better from a technical point of view to estimate a covariance between estimates of random factors (option unstructured). This option changes very little in the remaining estimates but gives a correlation between these estimates of .44 for leaders and .46 for parties.
In both models the size of contextual time variable, sd(days) = .01, is very small. Clearly mean score of leader and party sympathies varied very little over the period. The variation between individuals are much larger (sd residual) = 2.1 for leaders, 1.8 for parties. The first claim is confirmed. The first half of the second claim, an effect of left-right position, is confirmed but the analysis shows the effect to be the same , -1.1, for parties and leaders sympathy scores. this suggests that asking the respondents' sympathy for a party did not activate an ideological constraint stronger than the same question for a leader contrary to the second half of the hypothesis. The effect of vote intention is large in both cases and somewhat smaller for leaders (1.9) than for parties (2.1). The latter is plausible: the effect is stronger when asking twice about the same object (party) than asking about two different objects. In any case this supports the third (obvious) hypothesis.

***Table 5.3 Leader sympathy before 2006 election controlling for vote intentions, and left-right distance, with time as contextual variable.***

| Leader sympathy | Coef. | Std. Err. | z | P>z | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| Voting Intentions | 1.9 | 0.03 | 54.5 | 0.00 | 1.8 | 2.0 |
| Left-Right distance | -1.1 | 0.01 | -102.0 | 0.00 | -1.1 | -1.1 |
| constant | 6.4 | 0.03 | 253.5 | 0.00 | 6.3 | 6.4 |
| Random-effects Parameters | Estimate | Std. Err. | | | [95% Conf. | Interval] |
| intnr: Independent | | | | | | |
| sd(days) | 0.01 | 0.005 | | | 0.00 | 0.02 |
| sd(cons) | 0.89 | 0.02 | | | 0.84 | 0.93 |
| sd(Residual) | 2.07 | 0.01 | | | 2.05 | 2.08 |
| Log restricted-likelihood | -85436.4 | | | | | |
| N of observations | 38960 | | | | | |
| N of respondents | 4870 | | | | | |

***Table 5.4 Parties sympathy before the election controlling for vote intentions and left-right distance, with time as contextual variable.***

| Party sympathy | Coef. | Std. Err. | z | P>z | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| Voting Intentions | 2.1 | 0.03 | 68.0 | 0 | 2.1 | 2.2 |
| Left-Right distance | -1.1 | 0.01 | -118.8 | 0 | -1.1 | -1.1 |
| constant | 6.1 | 0.02 | 256.7 | 0 | 6.0 | 6.1 |
| Random-effects Parameters | Estimate | Std. Err. | | | [95% Conf. | Interval] |
| intnr: Independent | | | | | | |
| sd(days) | 0.01 | 0.005 | | | 0.00 | 0.02 |
| sd(cons) | 0.95 | 0.02 | | | 0.9 | 1.0 |
| sd(Residual) | 1.83 | 0.01 | | | 1.81 | 1.85 |
| Log restricted-likelihood | -81759.3 | | | | | |
| N of observations | 38960 | | | | | |
| N of groups | 4870 | | | | | |

We consider in an exploratory fashion some hypotheses for the post-electoral increase of leaders and party sympathies. The first two explanations are well known, and already adumbrated in the discussion of possible changes during the campaign. They are based on cognitive dissonance theory (Festinger 1957) which suggests (among other things) that individuals feel uneasy about clear differences in feelings about something (party, leader) and action undertaken with regard to it (vote). A substantial difference between vote and sympathy score should leave, according to this, a respondent somewhat uneasy. In the discussion about change during the campaign, we looked at the possibility o adjusting vote intention to feelings (changed by the campaign), or the inverse process (rationalization). Adjustment is more likely, is the driving force is campaign information, during the campaign. But once a definitive vote has been cast (or a definitive decision has been taken) rationalisation, adjusting the sympathy scores to the vote is also possible; moreover this is quite easy with the definitive vote actually cast. (cf Segatti et.al. 2010; Schadee, Segatti, Bellucci 2010).
We add to this the possibility that voters raise sympathy scores because the actual vote has put an end to the uncertainties of the campaign. We extend this in two specific ways. Many voters do not have, in general, positive feelings about politics, and specifically with political discussions and its uncertainties. They prefer to think of politics as a set of technical decisions to be made and carried out with only a limited debate. Discussion and opposition during a campaign is felt to be inappropriate. Such an attitude is related to some authoritarian personality characteristics (Stenner 2005 for extreme examples of this), but it is fairly widespread in general. If this mild form of allergy to political discussion is added to the idea that politicians should be honest and competent (to implement the decisions) then one moves in the area of what has been called stealth democracy (Hibbing, Theiss-Morese 2002; cf. Schadee, Segatti 2005). In all these cases feelings of relief that the campaign is over are relevant, and might account for raising the sympathy scores.
Given that the voters who raise their sympathy scores most appear as disaffected o disinterested – in terms of a typology of voter heuristics (Schadee. Baldassari) these are voters who think politics are a morally dubious affair (the type was called aliens, alienated), or in a more mainstream fashion are disaffected voters (In general Pharr, Putnam 2000, for Italy Segatti 2006) for various reasons. In addition one may note that for a disaffected voter the continuing presentation of politics in one form or another is in itself irritating; when the election is over and done with this may bring a certain relief in that the intrusion of politics in their daily life, and the pressure to take a decision and to act (to cast a vote) diminishes after the election, leading to somewhat more positive feeling.
The lack of increase in variance suggests that specific adjustment or rationalization hypotheses are not supported by the data, a small form of relief, especially for disaffected voters, is plausible on the basis of the data presented.
Only for one part of these hypotheses we offer a further analysis. We argue that if the effect of left-right distance on party and leaders sympathy scores increases after the election it might be that voters after elections feel more sympathies towards the party they have voted (rationalization), if it diminishes it would show a smoothing out of contrasts which cam plausibly be linked with forms of relief.
Table 5.5 shows the regressions of sympathy for leaders on left right placement and vote intention before the election; and of sympathy for leaders after the election on left right placement after the election and reported vote. There are not really any differences in the before and after estimates of the regression coefficients. One might argue that this is due to the further adjustments in the independent variables, but the regressions were also run with both independent variables only in their pre-election version, and there were no differences either. There is a difference of about .3 increase in the constant, this is again the general rise of sympathy scores after the election, now controlling for vote decision and left right position. On a more technical note the difference between estimates is an estimate of the difference (analytically) only if the independent variables are the same (regressions not reported, see above), bat as noted this did not change the results.

***Table 5.5 Effects of left-right distance on leaders and party after election (RCS, stacked)***

| Leader sympathy | Before election | After election | .Differ After -Before |
|---|---|---|---|
| Left right distance* | -1.04 | -1.02 | .02 |
| Party choice** | 1.69 | 1.49 | -.20 |
| Constant | 6.34 | 6.65 | .31 |
| R2 | .30 | .34 | .04 |
| | | | |
| Party sympathies | Before election | After election | Differ. After Before |
| Left right distance* | -1.06 | -1.04 | .02 |
| Party choice** | 1.92 | 1.63 | -.29 |
| Constant | 6.01 | .635 | .34 |
| R2 | .36 | .40 | .04 |

*Before election this is left right before election, after left right after election
** Before election this vote intention of decided, after election this is reported vote

### *6. Abstract, summary, conclusions recommendations*

In the forty days before the 2006 general elections in Italy, 200 respondents were interviewed telephonically each day in a rolling cross panel design. Half were also interviewed after the elections. The questionnaire asked sympathy for leaders and parties, intended vote , standard socio-demographic, interest in politics and the election, left-right self placement, main television channels followed for news and some attitudinal questions. The post election questionnaire repeated the questions about parties and leaders and asked the actual vote.
This paper has a general objective : to suggest that more can be done with rolling cross section data than is usually done; and two specific objectives. Firstly, it analyzes questions about sympathy for leaders and parties.. In an unfolding analysis, using only ordinal properties of the sympathy data it notes a difference in the party configuration before and after the election, while the configuration for leaders stays the same. Analyzing the means of the sympathy scores for parties and leaders it notes a jump in these scores after the elections, mainly due to respondents with very low overall scores before the elections - which by further analysis were identified as being politically disaffected - the jump occurred after the elections. But despite some hypotheses and analyses the precise reasons for this increase are unclear. Analyses treating the data as multilevel, using mixed models to investigate the jump in sympathy scores further. The RCS design clearly strongly supports the idea that the changes occurred not during the campaign, but after the elections, which is hard to discover from the usual pre-post panel or separate sample designs.
Secondly, the paper deals with some methodological issues of RCS data in multiple party systems.. The sample is distorted (eg low education is underrepresented ) systematically, as are most telephone surveys in Italy. However the distortions are systematic, analysis shows the daily samples can be seen as random realizations of samples from the same population, though slightly different ones for the pre-election and post election daily samples. A conclusion drawn from this is that if the preoccupation with representativeness and prediction of the vote is given up (though sampling design should guarantee overall variability) then the RCS data can be compared on a daily basis, and more in general that in future telephone pre-election surveys design characteristics should be maintained on a daily samples, since the cost of RCS pre-election telephone survey is not much greater than that of a pre-election telephone survey, but is more informative.

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