Can We Trust Recall-Data?*

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Introduction

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show that such data are usually saddled with considerable – and partly systematic – sources of error (Weir 1975; Van der Eijk & Niemøller 1978; Himmelweit et al. 1978; Petterson 1978, 167). However, data from other countries do not necessarily have validity also for Norwegian voters and in this article we shall discuss the following three questions:

- 1. To what extent do Norwegian voters give correct information about their voting at previous elections?
- 2. To what extent is incorrect reporting systematic?
- 3. Under what conditions does incorrect reporting occur?

There may be many reasons for inaccurate reporting, but both earlier research on this question as well as general knowledge about human behavior point towards two main explanations.

First, we believe that erroneous recall can be traced back to a conscious or unconscious wish to act consistently. According to central theories in social psychology most people have a strong desire for consistency in their attitudes and in their behavior (Festinger 1957; Kiesler et al. 1969; Piaget & Inheler 1973). A lack of conformity between attitudes and action, or between different attitudes, causes confusion in people's cognitive structures and in their relation to their environment, which is often experienced as unpleasant. Moreover, consistent behavior and conformity between attitudes and behavior is interpreted as a positive quality to be aimed at. Such a desire for consistency can cause persons who have changed their party preference since the last elections to be more inclined to give incorrect information about earlier voting than those who have adhered to the same party. The wish for consistency will most likely also influence the direction of the erroneous recall. Thus, incorrect reporters among unstable voters will, for example, often say that they previously voted for the same party as they did at the last election. We presume in other words that the consistency perspective - as we shall call this way of thinking - influcences both the form of incorrect recall taking place as well as the category of persons giving incorrect information about earlier voting.

However, pronounced erroneous recall among unstable voters does not necessarily have to be due to a conscious or unconscious wish to appear consistent in relation to the parties. It can also be explained by the fact that the more one changes party, the more difficult it becomes to remember how one voted at previous elections. Incorrect recall owing to lack of ability to remember earlier voting behavior correctly or owing to

indifference does not, however, only occur among unstable voters. It is doubtlessly a general phenomenon which also affects stable voters though perhaps to a lesser degree. Memory failure is therefore our second main explanation for incorrect recall of earlier voting, and we term this way of thinking memory perspective. There are strong indications for assuming that factors like education, political interest and a feeling of distance to the political system, have an influence on people's memory where political issues are concerned. Education gives training in intellectual skills and also develops the ability to understand the questions asked in interviews. Interest in politics entails considerable emotional involvement in political matters, and people usually have a better memory in matters that mean a lot to them. Political alienation influences people's dissociation from politics. Some feel that political issues are complex and mean little to them, while others are of a different opinion. This line of thought therefore suggests that with increasing education, increasing political interest, and decreasing feeling of alienation, there is a reduction in erroneous recall.

Two important factors — age and party identification — should also be mentioned. These factors combine elements from both models. It is usually easier for young voters to remember previous voting because, as we know, memory weakens as one gets older. Yet with increasing age there is also usually increasing interest in politics and party affiliations. It can therefore be difficult to make a suggestion as to which factors are most significant and what will be the 'net' result with regard to erroneous recall.

Party identification is characterised by a similar contrast in relation to incorrect recall of earlier voting (Campbell et al. 1964, 65–96; Budge et al. 1976). On the one hand, affiliation to one particular party will, in the same way as interest in politics, increase the condition for being able to give a correct statement of previous voting; on the other hand, the need for appearing consistent will increase with increasing affiliation to the party. With stable voters this will increase the likelihood of correct reporting of previous voting. Thus both aspects point in the same direction and we expect a decrease in incorrect recall with increasing party affiliation. With unstable voters, however, an increasing desire for consistent behavior has a contrary effect, and we expect an increase in incorrect recall with increasing affiliation to the new party. Thus the two aspects in this group act along different lines, and it is difficult to suggest the result as regards incorrect reporting even though we do believe that the wish for consistent behavior is most important.

This ambiguity in relation to central groups of voters places party

stability in a special position in relation to the other explanatory variables we have discussed. We therefore organise the analysis of our third question into two steps: firstly, we examine which factors lead to erroneous recall of voters seen as a whole. Then we take up this question separately for stable voters and for unstable voters. In this way all nuances with regard to erroneous recall of earlier voting can be best demonstrated.

An evaluation of the accuracy of recall-data necessitates panel-data which contain 2 independent pieces of information about the voter's voting at a given election (t_1) : one answer given immediately after the election and one supplied at a later date (t_2) , for example, in connection with the next election. A comparison between these two statements about voting at t_1 will show how much we can rely on the answer given at t_2 , provided that the answer at t_1 is correct. Of course, this does not have to be the case, but there will most likely be only few exceptions. We assume, therefore, that the answer given right after the election is the correct one when two answers differ from each other.

Our data are based on the election research program at the Institute for Social Research in Oslo. The same sample of voters were interviewed at three consecutive elections: 1965, 1969, 1973 (Waldahl et al. 1974; Valen 1981). We can consequently examine the accuracy of recall-data over 3 periods (1965–69, 1969–73 and 1965–73). Our conclusions can therefore be far more reliable than deductions which are only based on one period. In addition to the fact that our sample is large (937 persons were interviewed at all 3 elections), this also means that our data are most suitable for the questions posed.

The Extent of Incorrect Recall of Previous Voting

Previous investigations about the reliability of recall-data disclose varying but partly extensive incorrect recall of previous voting. Both in the United States and in England where there (more or less) is a two-party system, between 10 and 30% state the wrong party, while in the Netherlands, where there is a multi-party system, the percentage is 30–35 (Weir 1975; Himmelweit et al. 1978; Van der Eijk & Niemøller 1978). The possibility of remembering wrongly or mixing up parties is naturally greater when there are many parties than when there are only two or three. We should therefore have reason to expect the Norwegian figures to be closest to the Dutch figures. This, however, is not the case. For our 3 periods there are only 14.6% (65–69), 16.4% (69–73) and 19.4% (65–73) who state that they voted for a different party at the previous election than they did in

reality. On the whole, Norwegian voters are thus relatively accurate in their reporting of previous voting and at the same time there are surprisingly small differences between the 3 periods. Actually, both our main perspectives indicate certain differences in incorrect recall over a period of time. The consistency model points in the direction of increasing erroneous recall with an increase of movement in the electorate, and the memory perspective points in the direction of increased erroneous recall with increasing time-difference between the two actual elections. On the one hand, this implies more incorrect reporting for the period 1969-73 when - as is well known - there was considerable unrest among Norwegian voters, than for the quieter period 1965-69. On the other hand, it implies that there is more incorrect recall for the 8-year period 1965-73 than for the two 4-year periods 1965-69 and 1969-73. The figures point in both these directions but the differences between these 3 periods are far too small to be significant. The conclusion, therefore, is that for voters seen collectively, there are no differences in incorrect recall between the periods which are included in this investigation. However, if we take our initial point of departure along the consistency line of thought, it is necessary to evaluate the extent of incorrect recall within 3 groups of voters which, at this point, are in totally different situations.

Firstly, the stable voters (who voted for the same party at both elections). This group is not under any consistency pressure which promotes erroneous recall, and it is also easy to remember how one voted last time when nothing has changed. Both our main perspectives point here in the same direction, and we anticipate very little incorrect reporting in this group of voters.

Secondly, the unstable voters, i.e. those who voted for two different parties at the two elections. These are in exactly the opposite situation: they will probably – consciously or unconsciously – feel a certain pressure about behaving consistently in their relation to the parties, and it is also easier to forget earlier voting when it differs from one's present voting. These two factors will often have a joint effect and enhance each other, and we anticipate considerably more erroneous recall in this group than among stable voters.

Thirdly, the former non-voters. Voting participation is often regarded as a civil duty. It is therefore likely that many people — consciously or unconsciously — will conceal that they did not vote at previous elections. We therefore anticipate considerable incorrect recall in this group as well.

Table 1 shows the anticipated pattern. Among stable voters there is very little incorrect recall in all 3 periods, and it is obvious that we can

Table 1. Incorrect Recall of Previous Voting in Different Groups of Voters. Percentage Showing Incorrect Voting

Period	Stable voters	Unstable voters	Former non-voters
1965-69	7	46	60
1969-73	5	36	83
1965-73	8	39	89
N varies between	599-696	156-233	21-26

fully rely on this group's recall of their previous voting. This is not the case for the other two groups. Thus among the unstable voters the number stating wrong party lies around 40%. The differences between the periods are somewhat greater here, but doubtlessly the most important point is that incorrect recall is far more usual in this group of voters. In the growing group of unstable voters, incorrect recall is, on the whole, so prevalent that recall-data give a very unreliable picture of earlier voting. For former non-voters this picture is even intensified. The period 65–69, it is true, does differ a little from the others, but, since the number of cases here is quite small, we again choose to point to the main tendency best illustrated by the other two periods. On the whole, people seem to have strong remonstrances against admitting that they remained at home at previous elections. For this group of voters – small as it may be — the information about earlier voting given through recall-data is completely without value.

Even though the recall-data about earlier voting behavior for voters as a whole may be considered to be of an acceptable quality, there is still a great variation between central groups of voters. There is extensive incorrect reporting among voters who changed parties between two elections and among voters who did not vote at previous elections. These groups of voters have increased in number throughout the nineteen seventies. We will therefore have to reckon with the fact that recall-data give an increasingly more unreliable image of voters' movements between the parties.

Forms of Incorrect Recall

The incorrect reporting of stable voters in the two 4-year periods does not have any clear patterns. The incorrect answers are spread over most parties without concentrating particularly on any special party and without any other systematics. Neither does the incorrect recall go in favour of the

party which the voter names as his second choice. For the 8-year period 65-73 there are, however, certain signs of systematics. 92 per cent of those who voted for the same party in 1965 and 73, also supported this party in 69, while the rest then chose a different party. A comparison between these two groups show that incorrect recall is considerably more frequent in the last group than in the first (47 against 4 per cent). Furthermore, about half of the erroneous recall in the last group goes in favour of the party voted for in the intervening election. When we compare two subsequent Storting elections, the intervening local election can be a similar disturbing element. The result of this is that political barometers from the second half of a Storting election period are probably less reliable than polls from the first part of the period.

The low number of stable voters with incorrect recall makes it difficult to draw reliable conclusions. A great deal, however, seems to indicate that incorrect reporting in this group of voters can largely be attributed to failing memory and little interest for politics.

The unstable voters are in a completely different situation. Firstly, the element of incorrect recall is much greater, and secondly, our main perspectives suggest that there will be systematic erroneous recall in favour of the party they voted for at the last election. In this way the voter gives the impression of being stable and consistent in his relation to the parties. This is also the easiest solution for those who actually do not remember how they last voted, but who do not like to admit it. Table 2 shows clearly that such systematic incorrect reporting really takes place.

Table 2. Systematic Incorrect Recall among Unstable Voters

	1965-69	1969-73	1965-73	
Percentage of incorrect recall occurring in favor of party				
voted for at election 2	85	70	66	
N	156	208	233	

There are small variations in the percentage of systematic incorrect recall between the different periods, but the main tendency is clear: unstable voters who have an erroneous recall of earlier voting, mostly state their present party. This has consequences both for conclusions about stability and change among voters, and for the result of weighing procedures in political barometers. This means primarily that recall-data

overrate the political stability among voters, particularly in periods with great movement in the electorate. Secondly, the under-estimation of changes of party which actually occur signifies that the progress of parties with increasing voters' support is underrated in political barometers, and that the falling off for parties on the decline is underrated.

The affiliation of unstable voters to their new party undoubtedly varies a great deal. According to our consistency line of thought, this fact will influence the extent of erroneous recall. The desire to behave consistently in relation to the new party will actually increase with the voter's increasing affiliation to his new party. However, such a splitting up of unstable voters gives very small groups. We cannot therefore say more than that the results mainly point in the direction we anticipated, but that the differences are so small that we cannot draw reliable conclusions.

The last group, the former non-voters, is small. This does not only mean that it is difficult to draw conclusions based on tendencies we discover, but also that possible systematic incorrect reporting among them is of little consequence for the total image of people's voting behavior. Still, the results are interesting.

Table 3. Systematic Incorrect Recall among Former Non-voters

	1965-69	1969-73	1965-73
Percentage of incorrect recall occurring in favor of party			
voted for at election 2	86	75	76
N	26	25	21

In all 3 periods, about 3/4 of this group state that they voted the same at previous elections as at the last election. There can therefore be little doubt that voters who wrongly state that they voted at previous elections to a very great extent state their present party. Thus the trend is similar to that of unstable voters, and intensifies the tendency of recall-data to overrate the stability of voters. This section has demonstrated that the rather modest incorrect reporting occurring among stable voters is essentially accidental, and does not cause systematic distortions. Incorrect recall in the two remaining groups, however, does cause distortions which clearly go in favor of the voter's present party. The great similarity between unstable voters and former non-voters, and few former non-voters, leads to a combination of these two groups in our further analysis.

Conditions for Incorrect Recall

We shall now evaluate which are the conditions that promote incorrect recall of previous voting. Earlier studies on this matter have mainly attempted to explain erroneous recall by the same factors as those which we included in our two explanatory perspectives (Weir 1975; Van der Eijk & Niemøller 1978; Himmelweit et al. 1978). These investigations do not, however, bring up any variables that present themselves as particularly significant. Partly there are no correlations or insignificant ones, and partly the investigations yield varying results. We shall evaluate the significance of the different explanatory variables jointly, and base our discussion in this section mainly on MCA-analysis (Andrews et al. 1967; Sonquist 1970).² Table 4 shows the results for the sample as a whole.

The results for the 3 periods are much alike. We can therefore have great confidence in their reliability, and they can be discussed jointly. Taken as a whole, the 5 predictors explain between 20 and 25% of the total variance. This explanatory ability can, however, be traced back almost totally to the divisions between stable and unstable voters. Therefore this confirms that this distinction is of utmost importance for the question of incorrect recall of previous voting.

Table 4. Explanatory Factors for Incorrect Recall of Previous Voting. Results from MCA-Analysis

	1965-69 ETA BETA	1969-73 ETA BETA	1965-73 ETA BETA
Party stability	.45 .45	.51 .49	.46 .44
Education	.04 .03	.04 .06	.04 .02
Political interest	.08 .07	.03 .02	.05 .03
Age	.04 .02	.06 .03	.04 .03
Party identification	.16 .02	.23 .09	.19 .07
R ²	20.2	26.4	20.7
N	853	829	823

Other investigations too find a similar correlation, though somewhat weaker. The explanations, however, differ somewhat from ours. Van der Eijk & Niemøller (1978) are, for example, of the opinion that the desire for consistent behavior hardly plays an important role. The most important reason for this conclusion is probably that unstable voters show little systematic incorrect recall in their data in favor of their present

party. However, the disagreement about the reason for the correlation is of less importance in this connection.

The ETA-coefficients show that there is a clear bivariate correlation between erroneous recall and party identification, even though the correlation is considerably lower than with party stability. When checking this correlation for the other explanatory factors it is, however, substantially reduced (as is shown by the Beta-coefficients). Therefore the independent significance of party identification is of the smallest degree. The reason for this must partly be said to be a relatively close connection between party identification and party stability. However, where incorrect recall is concerned, it is in our opinion at least as important that the voters' affiliation to their party has different effects for stable and for unstable voters. This is a key-point to which we shall return later in detail. Also Weir (1975) and Van der Eijk & Niemøller (1978) find a decline in erroneous recall with increasing affiliation to the party. None of them take a check on party stability, and their results can therefore be regarded as being in fair agreement with ours. But our data show that such a bivariate correlation does not give a complete picture of the relation between these variables.

For the other explanatory factors — education, age and political interest — both Eta- and Beta-coefficients are at a minimum. These variables are therefore of no importance for the extent of incorrect recall. This is apparently not in agreement with the idea behind the memory perspective, but does not signify that the idea is wrong. It can rather be said that the memory factor acts independently of these factors, and that it is our assumption about a systematic connection on this point that is wrong. Neither do the other studies referred to disclose any correlation between education and erroneous recall.

As regards political interest, both Weir (1975) and Van der Eijk & Niemøller (1978) find – with somewhat different indicators – that incorrect recall decreases slightly with increasing political interest. But both emphasize that the correlation is slight, and we too find a non-significant difference in this direction in the tables. Neither for this factor can there be said to be any notable difference between our findings and previous investigations.

There are, however, differences for age. Actually it is only Van der Eijk & Niemøller (1978) who have assessed the significance of age, and they find a steady and fairly definite reduction in erroneous recall with increasing age. In our introduction we stated that there are certain factors inherent in increasing age that point both in the direction of increasing

erroneous recall and a reduction in erroneous recall. Van der Eijk & Niemøller indicate the same factors but do not discuss how the results can be explained in relation to these alternatives. Our results suggest that the factors pointing in opposite directions counterbalance each other. But we find it difficult to state the reason why this is so. It is also difficult to say whether the differences between our results and the Dutch results are due to specific national characteristics or to different measuring and operationalizing procedures. However, our results are explicit for all the periods. Therefore we feel very confident about them, and we shall soon see that the pattern is exactly the same for stable and for unstable voters.

All in all, our results conform with earlier studies into this question. Definitely so, if we take into consideration the differences in political systems between the countries where these studies were made, and the variations in operationalization of some variables.

Since the distinction between stable and unstable voters has proved to be the most important explanatory factor, and as there are definitive differences between the situations of these two groups, there are grounds for evaluating the significance of the other explanatory factors within each one of these two groups. In order to investigate this, we have made 2 MCA-analyses: one for stable voters and one for unstable voters — in both cases with the other variables from Table 4 as explanatory factors. The results which — for reasons of space — we do not present here, show that these variables do not play any special role within each of the two groups. The total explanatory ability of the factors varies between 0 and 4 per cent, and the coefficients for education, age and political interest are very small, though somewhat varying. The coefficients for party

Table 5. The Correlation between Incorrect Recall and Party Affiliation in Stable voters and Unstable Voters. Adjusted Coefficients from MCA-Analysis*

Party affiliation		Stable voters		1	Unstable voters		
at t ₂	65-69	69-73	65-73	65-69	69-73	65-73	
Strong supporters	05	07	17	.53	03	.51	
Weak supporters	03	05	05	.24	15	03	
Non-supporters	.14	.28	.47	22	.10	22	
N	684	604	586	169	225	237	

Negative coefficient shows incorrect recall below average, positive coefficient above average.

identification are not much higher, but this variable necessitates a further discussion.

According to the consistency principle, increased affiliation to a particular party will increase the tendency of stable voters to report earlier voting correctly. This holds good. Table 5 presents the adjusted coefficient of the MCA-analysis for party identification, and shows a moderate, yet clear correlation in anticipated directions for all 3 periods. While there is *less* incorrect reporting among strong party supporters than among average supporters, the opposite is the case for those who do not feel affiliated to any particular party.

For unstable voters the situation is a different one. Strong affiliation to their new party will imply a desire to appear consistent in relation to it, and result in increased erroneous recall in accordance with the same line of thought as above. The results for this group are more uncertain, but the main trend is in the expected direction; the tendency to incorrect reporting increases with increasing affiliation to the party. One more reason why the trend here is more uncertain may be chance variations caused by a lower numerical basis. However, it may also be that the mechanisms we have suggested apply particularly for unstable voters who systematically make incorrect reports in favor of their new party, and do not so much apply to more incidental incorrect recall. If so, it will weaken the anticipated trend in the group as a whole. However, we have no possibility of finding out whether this really is so. But at least it is certain that one cannot assess the significance of party affiliation without distinguishing between stable voters and unstable voters, since on that point the groups differ too much from each other.

Also the other studies we have referred to have shown clear differences between stable voters and unstable voters where erroneous recall of previous voting is concerned. Still, in our opinion they have not sufficiently emphasized this important distinction, and neither have they drawn the necessary consequences. For example, they have not considered the importance of party identification for both groups separately which is necessary if one is to give a correct picture of the significance of this factor.

Consequences

Our data show that about 15% of Norwegian voters report the wrong party when questioned about their voting at the Storting election 4 years earlier. This is a lower percentage than in other countries where corresponding studies have been carried out; and yet it proves that recall-data give an incorrect image of people's voting behavior at a particular election. Nearly 70 per cent of the voters have answered correctly every time, about 15 per cent have reported wrongly once, a little over 10 per cent twice and about 3 percent all three times. This means that about 15 per cent of the voters represent about 2/3 of the total incorrect recall. However, the data clearly prove that incorrect recall is not restricted to a small atypical minority among voters but occurs in all groups of voters.

The voting pattern of the electorate at both elections is fairly indicative of their tendency to erroneous recall of previous voting. While over 90% of stable voters report correct party, only around 60% of unstable voters do so, and among former non-voters right down to 10%. There is a great difference, though, between the size of these 3 groups, and the figures above say little about the groups' relative contribution to the total erroneous recall. This is important for the understanding of the consequences of incorrect reporting, and we have worked out how great a share of the incorrect recall can be ascribed to each one of the groups.

Table 6. Contribution of Different Groups of Voters to the Total Incorrect Recall. Percentage.

	1965-69	1969-73	1965-73
Stable voters	36	25	30
Unstable voters	53	59	58
Former non-voters	11	16	12
Total	100	100	100
N	137	127	158

Table 6 clearly shows the consequences of the unequal size of groups. In spite of very moderate incorrect recall, stable voters contribute with about 30% of the total incorrect reporting, while former non-voters' contribution is only 10–15 per cent. Among stable voters there is no systematic trend in their erroneous recall. But among unstable voters and former non-voters a considerable majority report their present party. Erroneous recall has therefore consequences for conclusions about voters' movement between the parties. On the basis of Tables 2, 3 and 6 we have estimated that about 55 per cent of the total erroneous recall in the 4-year periods is systematically in favor of the voter's present party. For the 8-year period, the systematic incorrect recall is about 45%. The difference between the

4- and 8-year period is probably due to the fact that failing memory makes itself more felt with increasing time-lag between the elections.

The relation between stable voters and unstable voters is important for electoral researchers and opinion pollers, and there has been much discussion as to how recall-data describe this relation. It is usually claimed that such data do not capture all changes in the electorate and therefore overestimate the party-political stability (Hellevik 1972, 61-62). As regards this question we can divide the voters into 3 groups:

- a) Stable voters who remember wrongly. This group gives expression to change while their behavior is actually stable. About 30% of the faulty reporters.
- b) Unstable voters and former non-voters who remember incorrectly in favor of their present party. This group gives expression to stability while actually changing party. About 55% of the incorrect reporters.
- c) Unstable voters and former non-voters who remember wrongly but not in favor of their present party. This group is unstable and expresses it. About 15% of the incorrect reporters.

The difference between the two first groups suggests that net incorrect recall in a stabilizing direction constitutes about 1/4 of the total incorrect recall. For our two periods where there is about 15% erroneous recall, the recall-data will therefore overrate the voter stability with about 4%. Our data confirm therefore that political barometers using adjusting procedures based on this type of data, give progressing parties too *little* support, and declining parties too *much* support. This erroneous effect will probably be quite small in the beginning of each Storting period and increase further during the period so that it reaches the figures we have presented towards the end of the period.

Conclusions

Both the consistency perspective and the memory perspective are supported by our data. The consistency model is borne out by far greater incorrect recall among unstable voters than among stable voters, combined with considerable systematic incorrect reporting in favor of the present party. The memory perspective is borne out by the incorrect recall occurring among stable voters, where it is difficult to consider other explanations than failing memory — as a rule combined with little political

interest. People's tendency to wish for consistency in their attitudes and behavior, and their ability and desire to remember earlier voting correctly, are in reality closely connected. Memory failure will doubtlessly manifest itself in all groups of voters, but persons who are in a diffuse or inconsistent situation (unstable voters/former non-voters), are doubtlessly more apt to distort or wrongly remember previous voting. A considerably higher rate of incorrect reporting among unstable voters and former non-voters cannot therefore, in our opinion, be explained by their need for consistency alone. The reason is rather that such voters tend more readily to make erroneous recalls about previous voting because failing memory and the wish to behave consistently operate conjointly.

In the period 65-73, which is covered by our data, there was a growing movement in the Norwegian electorate (Valen 1981). The extent of incorrect reporting, however, changed only slightly from the first part of the period to the second part. With considerably more erroneous recall among unstable voters than among stable voters, it is nevertheless to be expected that a continuing increase in the electoral movements will impair the reliability of the recall-data. This means that such data must be used with caution in times to come. It will be important to know the magnitude of the sources of error that will have to be calculated with when using recall-data, for which problems it will be justifiable to use such data, and which consequences its use will have for one's conclusions.

NOTES

- 1 'Party identification' measures people's psychological affiliation with a particular party. The factor is measured by questions as to whether people feel connected to a particular party, and if they reply affirmatively, how strongly they feel this affiliation.
- 2 MCA is a multi-variate analysis technique resembling multiple regression analysis but which uses variables on all measuring levels. The Eta-coefficient describes the bivariate correlation between the dependent variable and each predictor. The Beta-coefficient describes this correlation when it is checked for the significance of the other predictors. R² shows how great a part of the variance in the dependent variable is explained by all the predictors jointly.
- 3. The 'adjusted coefficients' of the MCA-analysis show how much the value of each single category on the dependent variable deviates from the average value of the dependent variable in the sample as a whole, when it is checked for significance of the other predictors.

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In the period 65-73, which is covered by our data, there was a growing movement in the Norwegian electorate (Valen 1981). The extent of incorrect reporting, however, changed only slightly from the first part of the period to the second part. With considerably more erroneous recall among unstable voters than among stable voters, it is nevertheless to be expected that a continuing increase in the electoral movements will impair the reliability of the recall-data. This means that such data must be used with caution in times to come. It will be important to know the magnitude of the sources of error that will have to be calculated with when using recall-data, for which problems it will be justifiable to use such data, and which consequences its use will have for one's conclusions.

NOTES

- 1 'Party identification' measures people's psychological affiliation with a particular party. The factor is measured by questions as to whether people feel connected to a particular party, and if they reply affirmatively, how strongly they feel this affiliation.
- 2 MCA is a multi-variate analysis technique resembling multiple regression analysis but which uses variables on all measuring levels. The Eta-coefficient describes the bivariate correlation between the dependent variable and each predictor. The Beta-coefficient describes this correlation when it is checked for the significance of the other predictors. R² shows how great a part of the variance in the dependent variable is explained by all the predictors jointly.
- 3. The 'adjusted coefficients' of the MCA-analysis show how much the value of each single category on the dependent variable deviates from the average value of the dependent variable in the sample as a whole, when it is checked for significance of the other predictors.

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