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Notes and Comments

Memory for Past Vote: Implications of a Study of Bias in Recall

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For political scientists and pollsters the way the individual voted on previous occasions provides an important source of data. In the absence of longitudinal studies, recall of past vote tends to be taken as equivalent to actual vote cast. How accurate is such recall? How far does accuracy decrease with time, where recall concerns not one, but two, previous elections? How far do errors introduce a systematic bias in the conclusions drawn from such data?

We could find only two studies which had examined these questions. This is not surprising since such examination requires longitudinal data comparing vote cast at the time (usually obtained immediately after an election) with subsequent recall of the behaviour some four or five years later (usually obtained just after another election). In 1964 Benewick *et al.*[1] reinterviewed a sample from two neighbouring constituencies in the north of England who had first been interviewed by Trenaman and McQuail[2] in 1959 and asked how they had voted in the 1959 election. Three facts emerged from this study: first, 18 per cent made errors in their recall of past vote; second, votes for major parties were more accurately recalled than were votes for Liberals or abstentions; and third, those who had changed their vote were not only less accurate than were stable voters, but erred in the direction of making the previous vote consistent with the vote they had just cast. The errors, therefore, led to an overestimate of stability of vote and of support for the major parties. Summarizing the results of Parry and Crossely's study of a representative sample in Denver,[3] Calahan[4] found that between 22 per cent and 30 per cent could not recall correctly whether or not they had voted in the preceding presidential and state elections. Here, too, faulty recall was not random; instead it erred in the direction of underestimating the number of abstainers.

The results of the two studies proved sufficiently challenging to warrant closer examination of the extent and type of bias introduced through relying on recalled, rather than actual, vote. The only other relevant studies of errors in recall of earlier events come from medicine and child development. Both fields rely heavily on the accuracy of reporting of past events or symptoms. In such studies mothers were asked for the medical history of their children which was then checked against hospital records.[5] On the basis of the findings of these studies

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[1] See R. J. Benewick, A. H. Birch, J. G. Blumler and A. Ewbank, 'The Floating Voter and the Liberal View of Representation', *Political Studies*, XVII (1969), 177–95.

[2] See J. Trenaman and D. McQuail, *Television and the Political Image* (London: Methuen, 1961).

[3] See H. J. Parry and H. M. Crossely, 'Validity of Responses to Survey Questions', *Public Opinion Quarterly*, XIV (1950), 61–80.

[4] See D. Calahan, 'Correlates of Respondent Accuracy in the Denver Validity Survey', *Public Opinion Quarterly*, XXXII (1969), 607–21.

[5] See E. A. Haggard, A. Brekstad and A. G. Skard, 'On the Reliability of the Anamnestic Interview', *Journal of Abnormal and Social Psychology*, LXI(1960), 311–18; N. Livson and D.

together with those of laboratory studies of memory,[6] we made the following predictions:

(1) accuracy would decrease with the passage of time;

(2) the degree of accuracy would vary (*a*) with the effort of reconstruction required, and (*b*) with the extent to which the behaviour recalled was probable rather than esoteric (e.g. voting for the major parties rather than voting Liberal or not voting);

(3) inaccuracy would not be random but err in the direction of: (*a*) consistency with present behaviour, i.e. with how the individual voted at the time at which the recall is asked for, (*b*) social desirability, and (*c*) association with success.

To examine these predictions we used a longitudinal study of voting behaviour conducted by the senior author. The study extends over twelve years. A sample of men were first asked in 1962 at the age of 24–25 how they would vote if there were an election tomorrow and how they had voted in 1959, the first time they were old enough to vote. Subsequently, on the day after each of the general elections in 1964, 1966, 1970, February 1974 and October 1974, the subjects were sent a postal questionnaire asking them to indicate whether they had voted and, if so, for which party. On two occasions, in 1970 and again in October 1974, they were also asked to recall how they had voted in the preceding two elections. Their recall was then checked against the answers they gave the day after each of the elections in question.[7] We therefore had information about accuracy of recall extending over eight years, with one election (1966) being recalled twice: once in 1970 on the occasion of the subsequent election, and the second time in October 1974 after two intervening elections. Table 1 indicates the information obtained.

The sample, an entirely male age cohort, had been the subjects of a larger study begun in adolescence in which all the third forms of four grammar and five secondary modern boys' schools in the Greater London area were studied. Because the original research – an examination of the role of school and social background on outlook and behaviour – required a sizeable number of grammar school pupils, our sample contained more than would be found in a representative sample. This was already true when we first interviewed in 1962 and even more so in 1974 as more men with grammar school education continued in the study.[8] The final sample for whom we have full voting information from their first vote at age 21 (1959) until, and including, the sixth election in October 1974, consists of 178 men in their late thirties.[9]

McNeill, 'The Accuracy of the Recalled Age of Menarche', *Human Biology*, XXXIV (1962), 218–21; M. K. Pyles, H. R. Stolz and J. W. McFarlane, 'The Accuracy of Mothers' Reports on Birth and Developmental Data', *Child Development*, VI (1935), 165–76.

[6] See A. D. Baddeley, *The Psychology of Memory* (New York: Harper and Row, 1976); B. B. Murdock, *Human Memory: Theory and Data* (Washington, D.C.: Erlbaum, 1974).

[7] All measures of 'actual' vote in these and other surveys, e.g. those of Benewick *et al.* and of David Butler and Donald Stokes (see *Political Change in Britain: The Evolution of Electoral Choice*, 2nd edn. (London: Macmillan, 1974)) are, of necessity, 'recalled' votes in the sense that they were obtained just after the event. There is no way of 'observing' the behaviour as it occurs.

[8] See H. T. Himmelweit and B. Swift, *Social and Personality Factors in the Development of Adult Attitudes Towards Self and Society: An Eleven-year Follow-up Study of Adolescent Boys* (Report to the Social Science Research Council, London, 1971).

[9] Of the 450 young men interviewed in 1962, 40 per cent stayed the course over the full twelve-year period. Since we were only interested in complete voting histories, the 1970 questionnaire was sent only to those who until 1966 had returned all the questionnaires ($N = 365$). Again, in 1974 we contacted only those who had returned the 1970 questionnaire ($N = 246$). The loss of respondents on each occasion (i.e. generally after an interval of four years) was between 20 and 25 per cent. Although more of those with a grammar school education and those holding middle-class jobs remained in the sample, there remained sufficient diversity of

TABLE 1 *Recall and Voting Information Obtained from a Sample of 178 Men*

Voting: information obtained the day after the following general elections:	Recall of vote	
	In 1970 of	In 1974 of
1964	1964	
1966	1966	1966
1970	—	1970
October 1974		

Source: Himmelweit Longitudinal Study.

Seventy-one per cent of the sample had had a grammar school education and although 61 per cent had fathers in manual work, by the age of 38 only 17 per cent of our sample held manual jobs. The small number of working-class respondents in 1974 was due to the original sampling which biased the sample in favour of entry into non-manual work, differential loss during the period of study, and the considerable social mobility of the subjects between the ages of 21 and 38. Details of the sample are given in an earlier report by Himmelweit and Bond.[10]

We shall first present the findings from our longitudinal study and then, to test their generality, repeat several of the analyses using the Butler and Stokes' longitudinal sample.[11] For three of the elections which we analysed (1964, 1966 and 1970) the subjects in that study also recalled in 1970 the votes they had cast in 1964 and 1966. The advantage of Butler and Stokes' sample, by comparison with ours, is that it began as a large representative sample and, although it too suffered differential loss (only 42 per cent stayed the course), the final sample of 846 men and women is far more diverse in terms of age, social class and educational background.

RESULTS

Table 2 shows that the percentage of errors in recall[12] between two elections was 16 per cent, almost identical to that obtained by Benewick (18 per cent). The first prediction was confirmed. There was a decrease of accuracy over time, both when the same election (1966) was recalled four and eight years later and when two successive elections were recalled, with the more distant being less well remembered. However, time was not the only factor to influence recall.

present status, background and vote to make the analysis meaningful. Comparison of those who left with those who stayed showed fewer differences than might be expected by chance and none that related, within social status groups, either to interest in politics or to vote cast.

[10] See H. T. Himmelweit and R. Bond, *Social and Political Attitudes: Voting Stability and Change: A Developmental Study from Adolescence to Age Thirty-three* (Report to the Social Science Research Council, London, 1974).

[11] We should like to thank David Butler and Donald Stokes, and the SSRC Survey Archive at the University of Essex, for making these data available to us.

[12] The response 'can't remember' was treated as an inaccurate recollection. The actual numbers of such responses were very small and were related neither to the vote to be recalled nor to the vote cast at the time of recall.

TABLE 2 *Accuracy of Recall: Percentage of Sample (N = 178) That Correctly Recalled Their Vote in Prior Elections*

Election recalled	Recalled in in 1970	Recalled in in 1974
1970	—	74%
1966	84%	72%
1964	76%	

Source: Himmelweit Longitudinal Study.

TABLE 3 *Percentage Accuracy of Recall of Two Previous Elections as a Function of the Number of Times Subjects Voted for the Same Party or Abstained*

	Consistency based on votes cast in 1964, 1966, and 1970: No. of times voted for same party	
Recall in 1970 of 1966 and 1964 votes	Twice (%)	Three times (%)
Accurate twice	42	94
Accurate once	44	5
Inaccurate both times	14	1
(*N*)	(81)	(80)

	Consistency based on votes cast in 1964, 1966, 1970, Feb. 1974 and Oct. 1974: No. of times voted for same party		
Recall in 1974 of 1970 and 1966 votes	Three times (%)	Four times (%)	Five times (%)
Accurate twice	30	62	98
Accurate once	59	38	2
Inaccurate both times	11	0	0
(*N*)	(53)	(50)	(51)

Source: Himmelweit Longitudinal Study.

Among the same men, four years between 1966 and 1970 produced an error rate of 16 per cent and between 1970 and 1974 an error rate of 26 per cent. As Warrington and Silberstein have shown,[13] time is only one factor; what also affects accuracy of recall is the number of relevant intervening and hence potentially distorting events. Between 1970 and October 1974, the February election represents such a potentially distorting event.

The second rather obvious prediction was also confirmed, namely that the more habitual the response, the greater the accuracy since less effort would be required to reconstruct the past. If a person always travels by train to Cambridge, to recall ten years later how he had travelled requires little effort compared with that needed by someone who sometimes went by car, sometimes by train. The degree of consistency of vote provides a measure of the difficulty of the task, the greater the consistency the smaller the effort needed to recall past vote accurately.

We selected from the sample at the time of first recall (1970) two groups of consistent voters: those who in the 1964, 1966 and 1970 elections had voted three times for the same party (or had abstained); and those who had voted twice for the same party (or twice abstained). For the second recall exercise in October 1974, a longer vote history was available for each subject (five elections in all) and we were able to differentiate three groups of voters: those who had voted three, four and five times respectively for the same party or had abstained that number of times. Next we computed for each individual an index of accuracy of recall, based, in the first case, on recall of the 1964 and 1966 elections and in the second on recall of the 1966 and 1970 elections. Our prediction was confirmed. Table 3 shows an increase in the accuracy of recall with increased consistency of vote. This applied to votes for the different parties and to a lesser extent also to the few who made a regular practice of abstaining.

The other aspect of the second prediction concerns the relative accuracy of recall of major party supporters compared with Liberal supporters or non-voters. If factors that influence accuracy of recall operate differentially for the different parties (e.g. if Labour and Conservative voters tend to be more consistent than Liberal voters) this introduces one type of bias. This bias must be differentiated from a second type of bias introduced because the usual (in this case voting for a major party) is better remembered than the esoteric (voting Liberal or abstaining). Benewick in his study of recall of the 1959 election showed this to be true and to be independent of the differential consistency of voting for different parties.[14]

We examined this prediction by comparing the accuracy of recall of voters who had exhibited identical degrees of consistency but had done so with regard to different parties. The results confirm that there is better recall of the 'usual' (Table 4) than the 'esoteric'. Within each group, the major party voters were more accurate than Liberal voters or abstainers.

Turning now to the type of errors made, we confirmed Benewick's results: errors were not random but tended in the direction of *consistency with behaviour at the time of recall.* The wrongly named party tended to be, more often than might be expected by chance, the party for whom the subject had just voted (see Table 5).[15]

Two types of social desirability have been suggested which might influence the direction of error in recall: the first concerns the social desirability of voting which, as Calahan suggests, leads to an underestimation of abstentions, particularly among older respondents who are more

[13] See E. K. Warrington and M. Silberstein, 'A Questionnaire Technique for Investigating Very Long Term Memory', *Quarterly Journal of Experimental Psychology*, XXII (1970), 508–12.

[14] See Benewick *et al.*, 'The Floating Voter'.

[15] In inspecting this table, it is worth remembering that for any one individual an incorrect recollection consistent with present vote would occur in one instance out of three by chance. There are four possibilities in the recall of a vote (given three parties and the alternative of abstention). Since one possibility is that the individual was correct, there are three ways left of being incorrect.

TABLE 4 *Percentage Accuracy of Recall of Two Previous Elections as a Function of Vote Consistency for the Major Parties (Conservative and Labour) as Opposed to the Liberals and Abstention*

Recall in 1970 of 1966 and 1964 votes	Vote consistency based on votes cast in 1964, 1966 and 1970: No. of times voted for same party	
	Twice (%)	Three times (%)
Major parties		
Accurate twice	50	96
Accurate once	38	3
Inaccurate both times	12	1
(*N*)	(58)	(70)
Liberal abstention		
Accurate twice	22	(8)*
Accurate once	61	(2)*
Inaccurate both times	17	(0)
(*N*)	(23)	(10)

Recall in 1974 of 1970 and 1966 votes	Vote consistency based on votes cast in 1964, 1966, 1970, Feb. 1974 and Oct. 1974: No. of times voted for same party	
	Three times (%)	Four or five times (%)
Major parties		
Accurate twice	34	83
Accurate once	53	17
Inaccurate both times	13	0
(*N*)	(32)	(89)
Liberal abstention		
Accurate twice	24	58
Accurate once	67	42
Inaccurate both times	9	0
(*N*)	(21)	(12)

Source: Himmelweit Longitudinal Study.

* Numbers in parentheses are actual frequencies.

TABLE 5 *Errors in Recall: Percentage Distortion Towards Consistency with Vote Cast at Time of Recall (1970 and October 1974)*

	Errors in recall in October 1974 of:	
	Vote in 1970 (%)	Vote in 1966 (%)
Consistent with vote in October 1974	63	43
All other errors	37	57
(*N*)	(46)	(37)
	Errors in recall in 1970:	
	Vote in 1966 (%)	Vote in 1964 (%)
Consistent with vote in 1970	36	55
All other errors	64	45
(*N*)	(33)	(51)

Source: Himmelweit Longitudinal Study.

attuned than the young to these responsibilities. Haggard, Brekstad and Skard and Pyles, Stolz and MacFarlane[16] showed that mothers tended to exaggerate how early their children began to walk and talk, and Hagburg[17] has pointed out that attendance at an adult education programme for which the individual had enrolled was exaggerated in recall. We did not confirm this prediction. Table 6 shows that the underestimate of abstentions is the same as the underestimate of the Liberal vote and a function of a more general principle that the less probable is less well recalled than the more probable (i.e. voting for one of the major parties). We found that both a Liberal vote and non-voting were less well remembered than were votes for Conservatives and Labour. (Calahan's study does not permit testing this explanation of his findings.) Of course, these results may be due to the fact that our sample was more middle-class and more educated than a representative sample, and that for them the decision *not* to vote was often a positive one compounded of dislike of the party previously supported and lack of enthusiasm for any other. (We have evidence for this elsewhere.) This may apply also to the Liberals, so often the refuge of the discontented. But confirmation of our findings using Butler and Stokes' sample makes this explanation less likely.

The second type of social desirability which may affect faulty recall relates to the desire to

[16] See Haggard, Brekstad and Skard, 'On the Reliability of the Anamnestic Interview', and Pyles, Stolz and McFarlane, 'The Accuracy of Mothers' Reports on Births and Developmental Data'.

[17] See E. C. Hagburg, 'Validity of Questionnaire Data: Reported and Observed Attendance in an Adult Education Program', *Public Opinion Quarterly*, XXXII (1968), 453–6.

TABLE 6 *Accuracy of Recall of Two Preceding Elections by Vote Cast*

	Proportion of accurate recalls % (*N*)
A. Recall in 1974 of:	
Vote cast in 1970	
Conservative	84 (79)
Labour	92 (37)
Liberal	60 (15)
Abstention	42 (48)
Vote cast in 1966	
Conservative	86 (82)
Labour	77 (57)
Liberal	47 (15)
Abstention	42 (24)
B. Recall in 1970 of:	
Vote cast in 1966	
Conservative	89 (82)
Labour	87 (57)
Liberal	47 (15)
Abstention	63 (24)
Vote cast in 1964	
Conservative	91 (64)
Labour	85 (52)
Liberal	43 (21)
Abstention	39 (41)

Source: Himmelweit Longitudinal Study.

identify with the party in power, i.e. with success rather than failure. There were three changes of government in the decade studied: in 1964 from Conservative to Labour, in 1970 from Labour to Conservative, and in 1974 back again to Labour. Since few Conservatives ever recalled voting Labour and *vice versa*, the onus of identifying, in recall, with the party in power would fall mainly on the abstainers and the Liberals. No such trend was found. By and large the Liberals who inaccurately recalled their past vote tended to recall voting Conservative, while abstainers cast their recalled vote more evenly for either of the two main parties. The well-known flight away from the party in power, characteristic of by-elections or municipal elections, suggests a more complex situation, one in which identification with success may not be the appropriate explanation for attitudes to the party in power. Finally, we examined how far accuracy of recall varied with the respondent's level of education and with his interest in politics. No relation was found, once due allowance was made for differential consistency of vote.

Next, we tested each of the predictions using the Butler and Stokes' sample. Each of our findings based on the atypical longitudinal sample was confirmed. There was an increase in error over time from 11 per cent in the 1970 recall of the 1966 vote to 18 per cent in the 1970 recall of the 1964 vote. The more consistent the voter, the greater the accuracy. Among equally consistent voters, our finding that a vote for a major party was more accurately recalled than

TABLE 7 *Percentage Accuracy of Recall of Two Previous Elections as a Function of Consistency of Vote for Major Parties (Conservative and Labour) as Opposed to Liberals and Abstention*

Recall in 1970 of 1966 and 1964 votes	Vote consistency based on votes cast in 1964, 1966 and 1970: No. of times voted for same major party	
	Twice (%)	Three times (%)
Accurate twice	45	92
Accurate once	40	6
Inaccurate both times	15	2
(*N*)	(217)	(443)
	No. of times voted Liberal/abstained	
	Twice (%)	Three times (%)
Accurate twice	29	62
Accurate once	42	21
Inaccurate both times	29	17
(*N*)	(97)	(42)

Source: Butler and Stokes' 1963–70 panel sample.

a Liberal vote or abstentions was also confirmed (see Table 7). We again did not confirm the social desirability prediction that abstentions would be underestimated. Recall of an abstention was no worse than the recall of the equally unusual alternate course of action, a Liberal vote (Table 8). We also confirmed that recall error introduced a bias in that more of the errors than would occur by chance were consistent with the individual's vote at the time of recall and were in favour of one of the major parties rather than of the Liberals or abstention (see Table 9).

Confirmation by the larger and more diverse Butler and Stokes' sample of all of the findings obtained with our middle-class sample of men in their thirties testifies to the generality of the findings. In fact, our longitudinal sample, being younger and hence even more volatile in its voting than the larger sample, had a higher incidence of recall error (16 per cent) than did the Butler and Stokes' sample (11 per cent). These studies show that there is at the very least an error of around 10 per cent whenever we treat recalled vote of the preceding election as equivalent to vote cast, an error which goes up to around 20 per cent where recall concerns the election before last. Such inaccuracy would matter relatively little if the errors had been randomly distributed, but they were not. Two sets of errors are introduced which favour the major parties and lead to a serious underestimate of abstention and Liberal voting. First, more people vote consistently for one or other of the major parties than they do for the Liberals and habit makes recall easier. Second, even when habit is taken into account, recall of the usual is more likely, which again favours the major parties.

For students of forgetting, this is nothing new. It confirms the findings of the laboratory. But

TABLE 8 *Accuracy of Recall in 1970 as a Function of Votes Cast in 1964 and 1966*

Recall in 1970 of:	Proportion of accurate recalls % (*N*)
Vote cast in 1966	
Conservative	92 (290)
Labour	87 (369)
Liberal	56 (71)
Abstentions	45 (104)
Vote cast in 1964	
Conservative	86 (314)
Labour	83 (349)
Liberal	36 (95)
Abstentions	51 (71)

Source: Butler and Stokes' 1963–70 panel sample.

TABLE 9 *Errors in Recall: Percentage Distortion Towards Consistency with Vote Cast at Time of Recall (1970)*

	Vote in 1966 (%)	Vote in 1964 (%)
Consistent with vote in 1970	55	48
All other errors	45	52
(*N*)	(137)	(140)

Source: Butler and Stokes' 1963–70 panel sample.

these findings have serious implications for the student of voting, casting doubt on the validity of theories which are based on people's recall of past voting. This study emphasizes the need for longitudinal checks to permit the calculation of the overestimate of stability of vote due to faulty recall.

Political scientists have tended to overestimate consistency in electoral behaviour and, at least until recently, to explain deviations in voting as short-term fluctuations within the broader pattern of continued party allegiance. The voter also tends to overestimate his own consistency; so there is a conspiracy of error, of which pollsters in predicting elections and political scientists in looking for trends need to be aware. The bias is not only too great to be ignored but also likely to be on the increase as the voting behaviour of the electorate becomes more volatile. In the case of the sample we studied, only 19 per cent made the same choice at each of the six general elections (either voting for a given party or abstaining). If we add to the voters all those who preferred a particular party, even though they had abstained, only 26 per cent preferred the *same* party on every occasion.

The volatility of the electorate is well reflected in the many surprise outcomes of general elections here and elsewhere. Should this trend continue, then reliance on the recall of past vote as a substitute for a record of the vote at the time could be extremely misleading. Such a procedure would seriously overestimate the proportion of faithful voters, and with it the continued strength of allegiance to major parties.[18] Above all, it would hide the fact that the reliable voter who never deviates from his chosen path (either by abstaining or by voting for an 'adjacent' party), far from being the norm, is fast becoming the exception.

[18] See H. T. Himmelweit, M. Katz and P. Humphreys, *Shopping for Value: The Voter as Consumer* (mimeographed report, 1976).

Dr Marsh on Olson: A Comment

J. R. SHACKLETON*

OLSON'S MODEL

In a recent article ('On Joining Interest Groups: An Empirical Consideration of the Works of Mancur Olson Jr.', this *Journal*, VI (1976), 257–72), David Marsh has attempted to test Mancur Olson's hypotheses[1] concerning the rationale for individual or corporate membership of interest groups by using data from a study of the Confederation of British Industry.[2] It is the purpose of this Note to defend Professor Olson's broad theoretical approach from some of Dr Marsh's criticisms. Olson applies the insights of established economic analysis to political theory; it is not his methodology which represents an innovation, but rather the use to which it is put.[3] A defence of Olson's approach is, then, of necessity to some extent a more general defence of economic analysis.

Orthodox economic theory postulates that actors employ a rational calculus, weighing benefits against costs. An activity will only be undertaken if the expected benefits from the activity have a higher value to the actor than the costs he or she expects to incur as a result. These benefits and costs, it is important to note, may include both monetary and non-monetary elements, as a close reading of economists back to at least Adam Smith will show.

Olson's insight is to see that the class of activities to which the argument applies includes the act of joining an interest group. In Marsh's case, the logic predicts, firms will only decide to join the CBI if the expected value of the benefits of membership exceeds the expected costs to the decision makers. What lifts this statement out of the realms of the trivial is the nature of the benefits allegedly provided by the CBI and similar organizations. In particular, the CBI is usually held to exercise influence over government policy makers in the interests

* Polytechnic of Central London. This note owes something to discussions with my colleagues Gareth Locksley and Colin Whitbread. David Marsh himself and an anonymous referee have also helped to clarify my thinking.

[1] Mancur Olson Jr., *The Logic of Collective Action* (Cambridge, Mass.: Harvard University Press, 1971).

[2] W. Grant and D. Marsh, *The Confederation of British Industry* (London: Hodder and Stoughton, 1977).

[3] Brian Barry has pointed out that applying economic concepts to political questions is not at all a new procedure, but one which has been curiously neglected for much of this century. See Brian M. Barry, *Sociologists, Economists and Democracy* (London: Collier–Macmillan, 1970).