Revealing long-term trajectories of public opinion and polling in Britain: a new resource of historical data from the Gallup Poll in Britain, 1955-1991

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Abstract

From the 1930s to early 2000s, the British affiliate and later subsidiary of the Gallup Organisation conducted around three thousand surveys of public opinion in Great Britain. While the records of the headline results of some of these polls can be found in Gallup's monthly reports and news reports from the time, most of the individual level survey data was previously believed to have been lost. This article details how we have been able to reconstruct much of this important historical record, converting almost 800 survey datasets from 1955 to 1991 found in the archives of the Roper Center for Public Opinion Research. It first offers a brief overview of how the data was converted from the original column-binary format and what it reveals about methodological practices of Gallup in Britain. We then develop weights to improve the representativeness of the data across the entire time period, using the data to offer a number of insights into long-term trends in British public opinion.

Keywords: opinion polling, Gallup, British public opinion, survey methodology

Until recently, research on British public opinion lacked access to most of the single largest source of individual level survey data from the post-war period. Between 1937 and 2001, the British affiliate and later subsidiary of Gallup, Inc. conducted around three thousand surveys of the social, political, and economic attitudes of the British public. Over nearly three quarters of a century, the company's polling operations tracked public attitudes on key issues, personalities, and events of the day – such as voting intentions, approval of the performance of the government and party leaders, views on international crises, support for policies such as crime, social welfare, public health, and perceptions of the economy. These surveys had a reputation for quality, with Whiteley (1980: 272) remarking that Gallup's 'high standards of fieldwork and the sample designs have made it more accurate than most rivals'. While some national level data are available from monthly reports published by Gallup during the period from 1960 to 2001, and in compendiums of polling data (e.g. Gallup 1977; Heald and Wybrow 1986; King and Wybrow 2001), only a fraction of the individual level survey datasets have previously seen the light of day.[i]

This has limited researchers' ability to understand the dynamics of British public opinion over the second half of the 20th century – a period in which major economic and political changes have been attributed to changing societal values across most advanced industrial democracies including Britain (Dalton 2019; Inglehart 2008). Field (2021: 41) for instance laments the poor archiving of British opinion polls and the limitations that this has placed on scholars interested in societal change, highlighting in particular the large improvement that having access to Gallup polling data would provide. Although other important survey data exist from this period, such as the British Elections Study (BES), its predecessor *Political Change in Britain,* National Opinion Polls (NOP), and the annual British Social Attitudes survey, the coverage is inconsistent, particularly between election years (see Appendix 1).

Fortunately, Roper Center for Public Opinion Research at Cornell University has preserved 2,350 of the Gallup surveys covering the period between 1955 and 1991. These data were originally

stored in 'column binary format' based on antiquated IBM punch cards. That format makes them inaccessible to most researchers today in their raw form because contemporary software (including text editors) cannot open a column binary file. Furthermore, documentation for individual surveys is frequently incomplete. To solve these problems, we cross-referenced individual surveys to other contemporaneous records of how Gallup stored responses and coded demographic variables (such as the parliamentary constituency and region of respondents) and then wrote code to convert each of the column binary files to modern data formats. While the general survey method employed by Gallup during this forty-year period (quota-based sampling combined with face-to-face interviewing using a team of interviewers distributed across the country) was remarkably consistent, specific changes in design create further technical complications. These included the incorporation of computers in Gallup's sample design in 1970 to use an interviewer's history to optimise interviewer selection for specific surveys, as well as the proportion of interviews being carried out on street versus at homes greatly changing throughout the decades. To address these, we follow Berinsky (2006) and Berinsky, Powell, Schickler, and Yohai (2011) and construct weights to ensure the data are as representative as possible of the population.

Making the data usable thus required solving multiple technical challenges, but offers the prospect of deepening our understanding of social and political change in Britain between the 1950s and 1990s. In particular, the volume and frequency of polling makes it possible to analyse both short-term shocks to public opinion (such as in relation to major crises or events) and long-term processes of change and realignment. Furthermore, insights obtained through the data conversion process shed important new light on the historical methodological practices of Gallup (such as in relation to sampling and weighting) and more broadly on the historical development of opinion polling in Britain.[ii] Additionally, the survey weights we develop make the current data usable as well as offering a more general framework for weighting historical survey data in Britain.

The remainder of this paper is organised as follows. Firstly, we provide a brief historical overview of the activities of Gallup in Britain and describe the resulting collection held by the Roper Center. Secondly, having converted 798 polls from the archive (see appendix for details of the conversion process) we reflect on what we learn – and implications for researchers using historical British data – from the preserved data and documentation about the methods of Gallup's polling operations in Britain, and more generally how changing norms and practices in opinion polling reflect prevailing values and concerns in society more widely. Thirdly, we describe the dataset that results from our data conversion efforts, focusing in particular on the degree to which the samples are representative of known population targets. Fourthly, we develop weights that address imperfect quota-sampling procedures employed in collecting the data and demonstrate how these can refine our estimates of historical public opinion in Britain. Finally, we show how the resulting new weighted data resource – which we have merged into a single "mega poll" consisting of 771 out of the 798 surveys, and 798,341 respondents – provides novel and more granular insights into long-term trends in British public opinion than previous accounts. In particular, we show evidence of declining gender and social class gaps in vote choice and near parallelism in opinion change across age groups during the nearly 40-year period of analysis. While this illustration may be of particular relevance to public opinion scholars interested in electoral behaviour, it is important to note that it is a small part of what can be analysed with this treasure trove of data. The richness of the data and range of topics covered allows it to be utilised to address numerous research questions that public opinions scholars may have in political science more generally, as well as in disciplines such as sociology, history, economics, criminology, social policy, and marketing among others. We end with a discussion of the implications of these findings and future avenues for research based on the data.

The Data Legacy of the Gallup Poll in Britain, 1937-2001

The surveys conducted by Gallup over the post-war era provide an unrivalled resource on public opinion in Britain – due not least to their volume and regularity. Gallup was publicly active in political polling in Britain between 1937 and 2001 in several guises (for extended historical accounts, see Roodhouse 2013 and Field 2014). The British Institute of Public Opinion (BIPO), founded in 1937 by Henry Durant, was Gallup's first overseas affiliate (Roodhouse 2013: 224). In the 1950s, the company was renamed 'Social Surveys (Gallup Poll) Limited', only later (in 1992) becoming 'The Gallup Organization Limited', a direct subsidiary of Gallup Inc. Between 1938 and 1961, Gallup published its polls in the national daily newspaper *News Chronicle*, before switching to *The Daily Telegraph* in 1961 – a relationship that continued until Gallup ceased political polling in 2001. Starting in January 1960, Gallup also published a monthly subscription service, the *Gallup Political Index* (renamed the *Gallup Political and Economic Index* in 1991), reporting headline results from the most recent surveys.

Throughout this period, Gallup relied almost exclusively on quota sampling and face-to-face interviews. It was not until 1997 when the majority of the main monthly newspaper polling series switched to telephone interviews (Mortimore 2000). While quota sampling often performed very well (Worcester 1980: 556; 1996: 8), we demonstrate below that it produced substantial variation in key demographic variables across surveys which necessitate the construction of new sampling weights.

As noted earlier, the Roper Center holds 2,350 of the British Gallup polls between 1955 and 1991 – with the annual frequency of surveys conducted depicted in Figure 1.[iii] This reveals a considerable expansion of polling activities between the 1960s and 1990s, when our data ends.

[insert Figure 1 about here]

Unfortunately, not all Gallup data found its way to the Roper Center. We know, for instance, that Gallup conducted a considerable number of polls prior to 1957 (Gallup Jr. 1977; King and Wybrow 2001; Hinton et al. 1996). There is a solitary poll from 1955 in the Roper collection, and just three from 1956. The missing years between 1991 and 2001 are notable since Gallup was highly active in their polling activities during that period, as is evident from the amount of polling presented in its monthly reports. It is believed that survey datasets held by Roper were transferred to it when Gallup ceased its polling operations in Britain in 2001. However, the deposited data only runs until 1991 (covering the period up to the winding up of "Social Surveys (Gallup Poll) Limited"). While we therefore cannot be sure of the number of polls conducted by Gallup in Britain, this very likely exceeds three thousand in total. The location of the survey data for the final decade of polling remains unknown.

Breathing life into over 800,000 respondents from nearly 800 surveys

Although the data have been stored at the Roper Center, they have not previously been analysed having been stored in column binary format based on IBM punch cards with 80 columns and 12 rows. Column binary files cannot even be opened in a text editor. As a first step, we had to utilize custom software developed by the Roper Center to convert the column binary data to a format that could be read by a text editor. However, at this stage the information in the data was still not interpretable. Responses to a particular survey question could be spread across several different (and unconnected) rows and columns. The same column could also be used for multiple questions, either by using different rows or by using a filter to signal when the same row is used for each question. This makes conversion of the datasets a highly technical and time-consuming task. We describe the full process of column binary data conversion (and the thousands of hours involved) in Appendix 2, but one aspect of our work deserves mention here.

Perhaps not surprisingly, given the challenges associated with archiving survey data, not all relevant documentation made its way to the Roper Center. This meant that some variables were initially uninterpretable. However, in almost all cases, we were able to use other data and auxiliary information to determine the exact nature of the variables. Again, full details are in Appendix 2, but parliamentary constituency (district) offers one important example. These codes were missing from many codebooks. However, when available, these codes typically occupied columns 8-10 or 9-11 and had this distinctive pattern with digits 1-6 punched in the first column and 0-9 in the second and third, allowing us to identify these 3-digit constituency codes even in surveys for which no documentation was available (over this period the number of parliamentary constituencies ranged between 630 and 650). Then, using additional resources like constituency codes lists for the period from the UK Data Archive (The Data Archive 1998), and the existing Gallup codes, it was possible to deduce the constituency labels. The results were cross-validated with regions or which part of the country respondents received their television signal from (another administrative variable) where available. Linking parliamentary constituency and region – or, where the region was not available within the data, whether a respondent voted for either the Scottish National Party (SNP) or Plaid Cymru (the Welsh nationalists) and so was likely a Scottish/Welsh resident – also made it possible to figure out *when* Gallup switched constituency listings. As a result, we were able to recreate and validate constituency codes which would have otherwise been impossible to determine because the documentation was missing from the codebooks.[iv]

To decide which of the 2,350 surveys in the archive to convert within the period of our project's funding, we prioritised those that included a substantial number of questions relating to social, political or economic topics. Specific priority was given to surveys conducted as part of Gallup's monthly political omnibus. These typically included questions relating to voting intentions, prime ministerial and leader approval, government satisfaction, the 'most important problem' facing the country, the expected winner of the next general election, etc. – i.e. items that were asked regularly over a long time period. There was also a separate economic omnibus survey conducted by Gallup

which we have converted in much smaller numbers, though in certain periods (such as the 1970s) economic batteries were additionally included in the political omnibuses. We also actively invited recommendations from researchers working in related fields and converted all requests received. We did not convert surveys that were of a purely commercial nature, such as on the consumption habits of Readers' Digest readers[v]. To facilitate researchers in locating surveys that may be of interest – including ones that are not currently converted but could be in the future – we have created data abstracts for all surveys in the collection, in addition to uploading the questionnaires to the Roper Center archive in searchable Optical Character Recognition (OCR) format.

Methodological Insights from Our Data

We used the process described above (and in Appendix 2) to convert 798 historical surveys to modern data formats. We then recoded all variables to a standard format, merged the surveys together, and generated weights for the data. This results in a merged data file containing 771 of these surveys. Some were omitted from this merged data file for data quality reasons[vi] and others for belonging to different time series carried out by Gallup such as those they carried out in Britain on behalf of the United States Information Agency. While many researchers will be interested in the weights and numerical results, the data also 'open the black box' and shine a light on historical polling practices of relevance to contemporary users. Indeed, a close inspection of our data challenges some authoritative existing accounts on Gallup's research methodology. For instance, King and Wybrow (2001: xiii) report that surveys relating to politics involved interviews *only* with those 21 and over until 1969. According to their account, it was not until after 1969 when the voting age was changed to 18 and over, that Gallup interviewed those younger than 21. The individual-level data we converted demonstrates, however, that the samples were *always* 16 and above, with the exception of their General Election surveys.

Moreover, while Gallup reported that their surveys contained approximately 1,000 individual responses (King and Wybrow 2001), at least in the earlier years this was not strictly true. When

examining the individual datasets for duplicates, in surveys carried out in the late 1950s and early 1960s it is common to find multiple instances of the same response to all questions included. For instance, survey CQ037 undertaken in August/September 1957[vii] has exactly 1,000 individual rows or entry-points. However just 487 of these rows are unique. 167 rows appear twice, 41 thrice, 10 four times, 2 five times and 1 six times. So, the number of unique interviewees was 708 – almost 300 less than stated. For the remainder of the 1960s and up until the early 1970s, duplicate responses would still be sometimes found in surveys, but during this period there was often a specific column where rows that had been duplicated would be indicated by a punch and were thus readily identifiable. Thereafter – up until our data ends – such weighting appears to have been used far less frequently, and when so with fewer duplications.

The interviewer process may provide an explanation for this duplication. Most Gallup polls were carried out by quota sampling with interviewers asked to reach a certain target on the sex, age, class, and occupational status of respondents (Moser 1952; *The Daily Telegraph* 1964)[viii]. The interviews were carried out in-person through a panel of part-time interviewers – spread across the country to ensure sufficient breadth to cover ten English regions, Wales, and Scotland, and within these regions areas that varied in their characteristics from rural settings to cities as well as different conurbations within large metropolitan[ix] – who would typically conduct around 15 interviews each[x]. This process enabled large-scale surveys to be carried out quickly and economically. Furthermore, Gallup found that it minimised interviewer bias – given that interviewer differences were likely to cancel each other out – and helped prevent interviewer fatigue and low morale (Moser 1958: 192-193; Moser and Kalton 1971: 283-284). Response rates were not collected, with the explanation given in surviving documentation being that "While these are crucial in random or mail surveys, Gallup takes the view that they are not relevant for quota surveys since refusal leads to immediate substitution with another contact that fits the quota"[xi]. In saying that, an early study of Gallup interviewers found a success rate of over 80% in attaining full interviews from those they approached (Durbin and Stuart 1951).

However, it was not guaranteed that all of the questionnaires that Gallup sent out to interviewers would be returned, as interviewers could decide to decline or be unable to carry out their full selection of interviews. Thus, duplicating the answers of certain respondents appears to have been an early procedure for accounting for this particular form of (interviewer) non-response bias and weighting the data in the absence of the computational methods that we have at our disposal today. From the 1970s, Gallup did start using computers in their sample design which – based on an interviewer's history – made an "optimum selection of interviewers in relation to the nature, size and timetabling of the particular job at hand" (Moser and Kalton 1971: 283), which may account for the apparent phasing-out of their duplicate weighting procedure shortly afterwards.

Another insight that our data provides into the survey samples are changes in the locations of interview. In the early 1950s, Moser (1952) reports that around a third of interviews took place in the home, 10% in the office or factories, and 55% on the street or other. There was a concern expressed by quota samplers that this approach may have led to an under-representation of heavy manual workers, miners, dock labourers as well as too few unoccupied women, while getting too many that were engaged in distribution and transport. By 1956, when we have the first record of interview location in our data, this had flipped whereby approximately half of interviews took place in the home and a third on the street, perhaps to address these concerns. Indeed, at the end of 1965, Gallup even switched the order in which "home" and "street" appeared on the questionnaire, with street moving from first to second option reflecting the fact that it was no longer the dominant option. Up until 1978, home interviews would typically make up between 50-65% of interviews in a given survey, though from 1979 these started to drop again being replaced by more street interviews whereby only 15-20% of interviews took place in the home by the mid-1980s. Reports from work on the 1992 general election at least point to no mode effect of street or at home surveys (Worcester 1996: 11), though these changing patterns are worth noting. Thus, through the process of recovering the data, we obtained previously undocumented information about sample size, weighting through duplication of respondents, physical location of the interview

(e.g., home, street, work) and geographic location (e.g., parliamentary constituency). As we discuss below, we also discovered important details related to historical context and survey industry biases.

Demographic change and bias in historical question wordings

While survey researchers are often focused on how and why public opinion changes, the data we created greatly enhance our understanding of the social and historical context in which the survey research was conducted. In particular, the design and filtering of questions demonstrate that, as much as polls measure change in public opinion, they are also strongly shaped by contemporary circumstances. Questions had to keep up with domestic and international developments in order to be relevant. For instance, because of the change in the school leaving age to 15 in 1947 and then to 16 in 1972, as well as the growth in numbers entering higher education (see Bolton 2012) –in tandem with punch card limited space – multiple versions of the terminal education age demographic question have been traced which enabled meaningful differences to be captured. Whether respondents' households received ITV signal and their television ownership were dropped as demographics in 1962 and 1970 respectively thanks to the growth in infrastructure and device penetration, with the percentage of UK households with a television having risen from 36.5% in 1956 to over 90% by 1968 (Closer 2019).

In retrospect, the design of survey measures – and the influence contemporary societal attitudes had on them – provides a window into how much society has changed. The language and design of many questions would be unacceptable today. For example, Gallup regularly asked questions eliciting opinions towards 'coloured immigrants' when referring to ethnic minorities in Britain or 'negroes' when asking about perceptions of African-Americans in the US. Ad-hoc series featured questions that aimed to understand whether the British public felt Japan was a 'backward country'.[xii] Meanwhile, respondents were asked from 1965 up until the late 1980s if they considered homosexuality to be a 'serious social problem' and to men only (in the 1980s) if they had ever been 'approached' by a homosexual. These questions offer an important window into the prevalence of

bias at the time and the role of surveys in reflecting such social norms through utilizing this biased language, and also how much society has changed since.

The gendered nature of questions was equally noticeable. Those on matters including childcare, grocery shopping and domestic work were often only asked of women. This is indicative of the normative gendered role of these tasks, a division which has since reduced substantively even if it has changed at different rates for different social classes (Sullivan 2006; Vagni 2020; Zhou and Man-Yee 2019). A regular battery covering household and economic perceptions enquired about whether the firm 'you/your husband' worked for was busier than at this time last year. The demographics also reflected this gendered view, but changed in ways that echoed the increasing entry of women into the workforce (Creighton 1999). The question on Trade Union membership originally asked whether 'you/your husband' had a Union card with a 'yes' and 'no' answer. It then distinguished between 'yes self', 'yes husband' and 'yes self and husband', but it wasn't until 1979 that 'wife' was introduced in addition to 'husband'. The same goes for the occupation question which specifically asked for the husband's occupation for married women who were not working – but not the other way around – and that of the head of the household. Again, it wasn't until 1979 that the more gender-neutral syntagm 'chief wage earner' was used instead of the 'head of the household'. And throughout the entirety of the period covered by this project, the demographic question capturing a respondent's sex had not two, but three available response codes: 'Man', 'Woman: Housewife' and 'Woman: Not housewife'.

With the surveys made available through this project straddling the period before and after the introduction of 'permissive' (socially liberal) legislation, the wave of Commonwealth migration to Britain as well as the emergence of new political movements, the use of such language and routing may come as a shock to contemporary readers. Even more so when considering the face-to-face, pen-and-paper interviewing technique that Gallup used. However, they do reflect popular and elite discourses at the time (for a discussion of the political climate on immigration for instance, see

Ford 2019). Further, that Gallup did not shy away from investigating attitudes towards controversial topics is extremely valuable, despite the methodological difficulties presented by all questions having to be interviewer-administered. Having such data available at a respondent level thus greatly enriches our understanding of public opinion.

Merging and weighting 771 surveys across 36 years

Having highlighted corrections to the historical record regarding Gallup surveys, patterns of bias in surveys, and the effects of social change on survey design, we now turn to a discussion of how we weighted the merged data. As noted above, certain characteristics, such as quota sampling and duplicated respondents, present challenges that require adjustment (specifically, weighting). Thanks to our standardised use of variable names and labels in converting individual surveys, we have created a merged datafile that includes 771 survey datafiles and 799,225 respondents in total.[xiii] Figure 2 plots the number of survey respondents by year, revealing that the converted data is fairly evenly distributed (aside from a slight dip in 1969 where there were no data files archived covering May-September). The relatively uniform distribution is by design, as surveys from Gallup's monthly political omnibus were prioritised for conversion as previously discussed.

[insert Figure 2 about here]

[insert Table 1 about here]

It is illuminating to consider the range of questions asked in these polls (see Table 1). Nearly all include a question about voting intentions (740 out of 771); roughly two-thirds include Gallup's standard political questions – government approval and satisfaction with the Prime Minister; and about two-fifths the most urgent problem facing the nation and one-third the best party on the most urgent problem. Perceptions of party divisions appear in around a fifth of surveys; the best PM question in around an eighth. In addition, we have large numbers of important demographic variables, some of which have been recoded to standardise them across the full time period

(original versions of the variables are retained for users). The variables include age (categorical), gender, social class (both interviewer-coded and subjective), marital status, housing tenure, trade union membership and the region and parliamentary constituency of the respondent. Some of these appear in nearly every survey. The region variable was created through a combination of Gallup's coded region variables and our recoding of the constituency variable. While these reflect the most frequently asked questions, our data include a host of other questions that were asked in various surveys on topics such as wages, global powers, housing, pensions, education, welfare, crime, etc. (the coverage of items is even wider in the collection of individual converted datasets in the Roper collection).

As Berinsky (2006) and colleagues (Berinsky et al. 2011) note with reference to historical poll data from the United States, quota-sampling procedures can be problematic in terms of the degree to which they are representative of the adult population. This is especially true where highly reliable official population statistics only become available well after polls have been conducted because government data based on the census or other large surveys was not released at the time the polls were conducted. The violin plot presented in Figure 3(a), which shows the percentage of each sample aged 65 and over, highlights the sampling variation across surveys, particularly within each year. The hollow white circular marker indicates the mean value (within a given year), and the grey shoulders and spikes capture the distribution of values (within that year). While this reveals broad accuracy in the samples collected by Gallup, it also indicates a substantial degree of variance relative to much more stable population targets – the spread of the range of values was around 5 per cent (a quarter of this subgroup). The line graph plotted in Figure 3(b), furthermore, shows the percentage of the adult population as per mid-estimates from the Office for National Statistics. It is notable that the percentage of over-65s here is consistently above that suggested by the violin plot, suggesting that older voters may have been under-represented in Gallup's samples. The simple adjustment of this data to ensure that samples more closely match known population benchmarks would, therefore, be desirable.

[insert Figure 3(a) about here]

[insert Figure 3(b) about here]

While the Gallup data are highly regarded (e.g., Worcester 1980) Figures 3(a) and (b) help illustrate some of the challenges associated with quota sampling and potential benefits of generating poststratification weights. Creating a weighting scheme for this historical data faces two main obstacles. Firstly, it is necessary to identify demographic variables *in the surveys themselves* that were reliably collected over time, so generated weights provide a consistent adjustment to the estimates. Secondly, we need to identify appropriate population benchmarks from external sources that are likely correlated with survey responses to other questions, ideally on an annual basis, in order to calculate the population targets to be used in weighting. Accordingly, we use age by sex, region, social class, and union membership (details are provided in Appendix 5). We generate our weights through iterative proportional fitting, or 'raking', to produce a calibrated set of survey weights that match population totals (using 'ipfraking' in Stata, Kolenikov 2014). To enable convergence of the algorithm we used 10 iterations and a tolerance of 0.001, which brought the values within a couple of decimal points of the population totals.

Applications of New Data on Historical British Public Opinion

Having explored the technical and methodological challenges that had to be overcome to recover and weight the historical data, our final step is to validate the weights that we have generated and demonstrate the types of insights made possible by the new data. We focus our analysis here on a number of political survey items, but there are many other topics where the data offers potential for new insights. These applications are important for demonstrating both the methodological importance of addressing quota sampling procedures used in the collection of data and for how they help advance our understanding of British public opinion.

Evaluating our weighting adjustments of cross-sectional survey data

Firstly, we evaluate our weights. Figure 3(a), above, showed that on average the Gallup data recovered age benchmarks relatively well, but there was substantial variation within and across years (the same pattern exists for other population benchmarks such as social class and region). Thus, not surprisingly, the impact of our weights varies across surveys. Table 2 offers a snapshot of some of the areas where weighting matters most, comparing the values for unweighted and weighted data. We select polls from years where there was a particularly wide spread of quotas for sex (1966) and age (1970), taking polls at the top and bottom end of the distribution, and also include a further two polls from 1966 that asked about membership of the European Common Market. Of the first group of polls, the percentage of women in the sample ranges from 58.0% (GBSSLT1966-CQ476) to 34.2% (GBSSLT1966-CQ471) and percentage of over-65s from 10.8% (GBSSLT1970-CQ677) to 16.6% (GBSSLT1970-CQ726). We can see here that weighting the data has a significant effect on estimated voting intentions. Where the sample contains too few women (1966, 34.2%), the weighting adjustment reduces Labour support from 57.5% to 52.7% (nearly 5-points) whereas with too many women (1966, 58.0%) the weighting reduces Labour's support from 51.2% to 49.3% (just under 2-points). Of course, these adjustments in voting intentions may in part be due to weighting against other population benchmarks (e.g., age) as well.

We can additionally see the consequences of weighting for our final pair of surveys from 1966 which included a question about whether respondents approved of membership of the European Common Market (GBSSLT1966-CQ461, GBSSLT1966-CQ506). Here, the samples are more balanced in terms of the proportion of women and over-65s, but the weights still slightly uplift both variables, and have a clear effect in terms of increasing the Conservative vote, reducing Labour's vote, and reducing the level of support for Britain joining the European Common Market. Even where weighting has modest impacts on our estimates of public opinion, this exercise highlights how the samples themselves can be made *more representative* of the national population.

[insert Table 2 about here]

Weighting and cross-sectional trends in British public opinion

Our final step is to demonstrate how the weighted data enables us to reconstruct key trends in public opinion, validating whether the quota-sampling procedures employed by Gallup produced accurate depictions of public attitudes. This new data resource also enables us to explore short- and long-term dynamics of public opinion – and to consider how and why those dynamics vary across different cross-sections of society. Identifying over-time shifts in sub-group opinion is increasingly integral to the study of politics and to understanding both historical and contemporary social and political outcomes (e.g. Page and Shapiro 1992; Munzert and Bauer 2013; Harsgor 2018; Blanco et al. 2021). This collection of surveys offers a substantially greater number of data points, and respondents, than what was previously available. Certain long-term trends in public attitudes are especially relevant to recent debates over the changing voting behaviours of the British electorate, and we can look at them afresh using previously unavailable individual-level data.

Scholars have long debated the dealignment and realignment of class voting in British politics (see Evans and Tilley 2017). Our data provides support to those accounts that emphasise the decline of the working-class basis – as measured by the objective occupation-based measure – of Labour's vote through the period 1955 to 1991. Figure 4 plots (weighted) Labour support, where individual survey results are indicated with the circle markers, while the smoothed line is a line of best fit based on locally weighted scatterplot smoothing (LOWESS). The data also show that this decline was subject to fluctuations that reflected the party's standing with the public more generally (notably around the time of the 1970, 1979 and 1992 elections). Even more striking are Labour's gradual gains among the middle classes, though from a low base – with the overall trend between the 1950s and early 1990s amounting to a rise of at least 10 percentage points. Such trends highlight both how there is considerable inter-election volatility, and how recent shifts in the electorate have long roots. These patterns mean that the gap in working-class and middle-class support for Labour

declined from about 30 percentage points to only about 15 percentage points. We know from contemporary data that this trend has continued to narrow (see Ford et al. 2021).

Accounts of recent elections have suggested that age is a structuring force in voting behaviour in British politics (Sturgis and Jennings 2020). Interestingly, the data plotted in Figure 5 suggests that (notwithstanding the survey data being sparser during this period) there may have been a similar pattern in the years prior to the mid-1960s – with Labour's vote being substantially higher among younger voters. For the period between 1966 and 1979, there was little difference in Labour support across the 18-29, 30-49 and over-50s age groups for most of the observed period. Notably, a clear age gap in party support re-opens in 1979, around the time that the first Thatcher government was elected, where Labour's vote is around 5 percentage points higher among 18-29s than 30-49s and over-50s. This gap starts to narrow again towards the end of the 1980s. This provides an important context to the recent trend of young voters heavily supporting Labour and older voters tending to favour the Conservatives.

So far, we have seen the declining gap in class voting and emergence of a generational divide in party support during the 1980s. What does the Gallup data tell us about the political loyalties of men and women? Figure 6 plots the Conservative lead over Labour for the voting intention of men and women. The data extend the time-series back further than previous studies, which relying on election study data were only able to examine election years from 1964 forward (Shorrocks 2016) – enabling us to add nearly a full decade in addition to being able to see how these patterns may have changed or remained stable in the years between elections. This figure confirms that the gender gap in party support has been in long-term decline over the second half of the twentieth century – with the Conservatives doing considerably better among women but the difference shrinking over time. This pattern aligns with the work of Shorrocks (2016: 242) who found a larger – though not significant – gender gap at the 1992 election than any of the three previous general elections. Studies of more recent elections, outside the scope of this data, suggest the gender gap

has disappeared altogether, and indeed has flipped so that women were more likely to vote Labour than men in 2017 and 2019 (Campbell and Shorrocks 2021). One notable consequence of weighting is that the gap between men and women is more stable over time, narrowing steadily (with weighting preventing any cross-over of the two series).

[insert Figure 4 about here]

[insert Figure 5 about here]

[insert Figure 6 about here]

Reflections and future directions

In this paper we have detailed an extensive new data resource of public opinion in Britain. Through the conversion of 798 surveys from antiquated column binary format and data on almost 800,000 respondents with regular questions throughout on voting behaviour, government/leader approval and economic perceptions to name but a few, these data provide unprecedented insights into the views of the electorate on social, economic and political topics over the second half of the 20th century. There is no equivalent resource for the British case with this volume and density of polling since the mid-1950s. Thus, these data offer public opinion researchers the opportunity to unearth valuable insights into long-term trends in British public opinion, and to trace the contextual roots of contemporary attitudes. They also create the opportunity for comparison with equivalent historical data held on other countries.

To highlight some of the data's uses, we have shown how it provides evidence of the gradual shrinking of the gender gap in the Conservative-Labour vote as well as Labour's slow erosion of support with working class voters (combined with its gains among the professional classes). We also uncovered some stability among different age groups between the 1950s and late 1970s, with the emergence of an age gap in voting intentions during the 1980s, and evidence of high levels of disapproval of government among Labour supporters during the 1980s. While many aspects of

the long-term trends we show here will be familiar to researchers, the volume and volatility of survey responses combined with the starting date in the 1950s means this offers unrivalled insights into the dynamics of British public opinion during the post-war years.

While these over-time patterns illustrate the potential value of the data, even more insights will be possible through *individual-level*, multivariate analysis, aided by the range of demographic variables contained within. Furthermore, the data also makes it possible for the first time to evaluate trends for many other outcomes over this important period of post-war British history, among them Britain's relationship with Europe, immigration, the Cold War and the liberalisation of social norms – as well as public opinion around significant events in this period of history (such as the Profumo Affair, 1975 EEC referendum and 1984-85 miners' strike or, as Smedley (2023) has analysed, public opinion on German reunification). While some other data collections exist (as are summarised in the online appendix), and have been used to inform important accounts of postwar British public opinion, they are not nearly as extensive as the Gallup collection.

Our data conversion efforts also offer important insights into the methodological practices of Gallup, notably with regards to their use of quotas and weights – something that was not publicly reported with their vote intention estimates. We highlight how early surveys—and in some cases into the 1990s—utilized and perpetuated biased language against minorities and women. This emphasises how the way in which questions are asked can by themselves give valuable insights into societal norms and how they change over time.

In conclusion, the British Gallup poll series offers a wealth of data for economic, social and political analysis. The monthly – or in some cases even weekly – surveys make it possible to analyse specific events or to pinpoint changes in the general opinion trends in between elections, while the substantial sample size that can be obtained through combining consecutive surveys allows for analysis to explore patterns of responses for smaller groups. To enable further analyses, we have archived the converted data sets at the Roper Center for Public Opinion Research at Cornell

University which have specially been made freely available to any individual based at a UK higher education institution in addition to individuals/institutions with a subscription to the archive.

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Endnotes

[i] The major data collections are seven general election surveys stored in the UK Data Archive (Gallup election surveys were conducted in 1964, 1970, February and October 1974, 1979, 1983 and 1987 (SN 2051, 1353, 658, 659, 1852, 2278), 59 selected wartime polls conducted by BIPO (SN 3331), and a database of 34 Gallup polls conducted in the January of each year from 1958 to 1991 (SN 3803). See https://ukdataservice.ac.uk/find-data/.

[ii] The wider history of polling in Britain is covered by Worcester (1991), Broughton (1995), McDonald and King (1996) and Moon (1999) though we note that it is interesting there have been no comparable updates in the twenty-five years since.

[iii] These are mostly national polls of Great Britain, excluding Northern Ireland, but a small number (around 50) of special in-depth surveys (prefixed 'S.' in the Gallup naming system) are held by the Roper Archive. These tended to be samples like motorists, tourists, young people, but a small number were of specific geographical areas (including constituency polls).

[iv] Moreover, this also provides the means to ascertain which constituencies were most frequently utilised as part of the sampling strategy. For example, it reveals that some polls included fieldwork in Scotland in the thinly populated part of the country north of the Caledonian Canal (via codes for Caithness and Sutherland, Ross and Cromarty and Skye).

[v] When batteries of surveys that we did convert were purely of a commercial nature, we also did not convert these to focus on material of most relevance to researchers. However, we left the "raw" data for these in the data files for preservation purposes.

[vi] Take for instance British Gallup Poll CQ682 from 1970 (https://doi.org/10.25940/ROPER-31082855) for which upon conversion it was revealed that the responses from female respondents had not reached the archive.

[vii] See *British Gallup Poll CQ 37 (GBSSLT1957-CQ037), Social Surveys (Gallup Poll) Limited, August 1957* https://doi.roper.center/?doi=10.25940/ROPER-31082764.

[viii] These were initially taken from the pre-war *Home Market* and later replaced by *The National Readership Survey (NRS)* established in 1956. For social class, it appears that the targets from *Home Market* were unchanged between 1955 and 1966, before the NRS social grades were introduced as the targets in 1967.

[ix] See documented attached to: United States Information Agency 'USIA Poll # 1987-I87026: Security Issues Survey', *Roper Center*, https://doi.org/10.25940/ROPER-31083899.

[x] Interviewers had been instructed to carry out the fieldwork "as near to your home as is compatible with fulfilling your quotas and getting a good mixture of the local population . . . Nothing is gained by trying to cover all parts of your area. We are anxious for your sake and our own that travelling should be reduced to an absolute minimum". They did not, however, allow more than three interviews in any one block of flats, row of houses or factory; nor for anyone be interviewed in a second survey (Moser 1952).

[xi] See documented attached to: United States Information Agency 'USIA Poll # 1987-I87026: Security Issues Survey', *Roper Center*, https://doi.org/10.25940/ROPER-31083899.

[xii] See *British Gallup Poll CQ518 (GBSSLT1967-CQ518), Social Surveys (Gallup Poll) Limited, March 1967* https://doi.org/10.25940/ROPER-31074396.

[xiii] Generally, the wording of questions remained identical once items were introduced by Gallup. Where there were adjustments in question wording these are fully documented (see Appendix 3).

Table 1. The most frequent questions in the Gallup surveys, 1955-1991

Question	**N of polls**	**N of respondents**	**Earliest**	**Latest**
Voting intentions	740	762,704	1955	1991
Government approval	513	517,432	1957	1991
Prime ministerial satisfaction	540	546,956	1957	1991
Expected election winner	288	301,924	1955	1991
'Most important problem' (MIP)	303	307,565	1957	1991
'Next most important problem'	206	205,831	1959	1991
Party best on MIP	237	238,644	1957	1991
Party united: Conservatives	143	145,100	1965	1991
Party united: Labour	146	148,257	1962	1991
Party united: Liberal/Alliance	68	67,577	1981	1987
Best Prime Minister	100	104,922	1957	1991
Price expectations	185	188,299	1957	1990
Unemployment expectations	183	187,308	1957	1990
Demographics				
Region	771	797,023	1955	1987
Constituency	669	683,020	1959	1991
Home owner	591	599,254	1957	1991
Sex	771	797,900	1955	1991
Social class: coded	770	796,572	1955	1991
Social class: subjective	526	532,032	1955	1982
Age	771	797,499	1955	1991
Marital status	770	793,763	1955	1991
Union membership	749	760,731	1955	1991

Table 2. Unweighted and weighted estimates of public opinion

				Over-65s (%)		*Women (%)*		*Vote: Con (%)*		*Vote: Labour (%)*		*Government approval (%)*	
Year	*Survey ID*	*Fieldwork*	*Sample*	*Unweighted*	*Weighted*	*Unweighted*	*Weighted*	*Unweighted*	*Weighted*	*Unweighted*	*Weighted*	*Unweighted*	*Weighted*
1966	GBSSLT1966-CQ476	3.5.1966-28.5.1966	1,167	15.5	**18.2**	58.0	**52.8**	39.5	**41.2**	51.2	**49.3**	-	**-**
1966	GBSSLT1966-CQ471	3.4.1966-28.4.1966	1,568	14.5	**17.8**	34.2	**52.8**	34.4	**38.2**	57.5	**52.7**	53.6	**51.3**
1970	GBSSLT1970-CQ677	12.2.1970-15.2.1970	1,116	10.8	**17.4**	50.9	**52.6**	48.9	**47.7**	40.3	**42.2**	29.8	**31.5**
1970	GBSSLT1970-CQ726	3.12.1970-28.12.1970	949	16.6	**18.1**	51.5	**52.5**	41.1	**39.4**	49.3	**51.1**	-	**-**
												Approve joining ECM (%)	
1966	GBSSLT1966-CQ461	27.1.1966-1.2.1996	1,036	14.6	**18.2**	49.9	**52.8**	43.8	**45.6**	49.6	**47.7**	60.7	**58.8**
1966	GBSSLT1966-CQ506	3.12.1966-28.12.1966	1,052	14.8	**18.1**	52.3	**52.8**	42.3	**43.3**	45.5	**43.4**	65.5	**65.2**

Figure 1. Number of UK Gallup Polls in the Archive of the Roper Center, 1955-1991

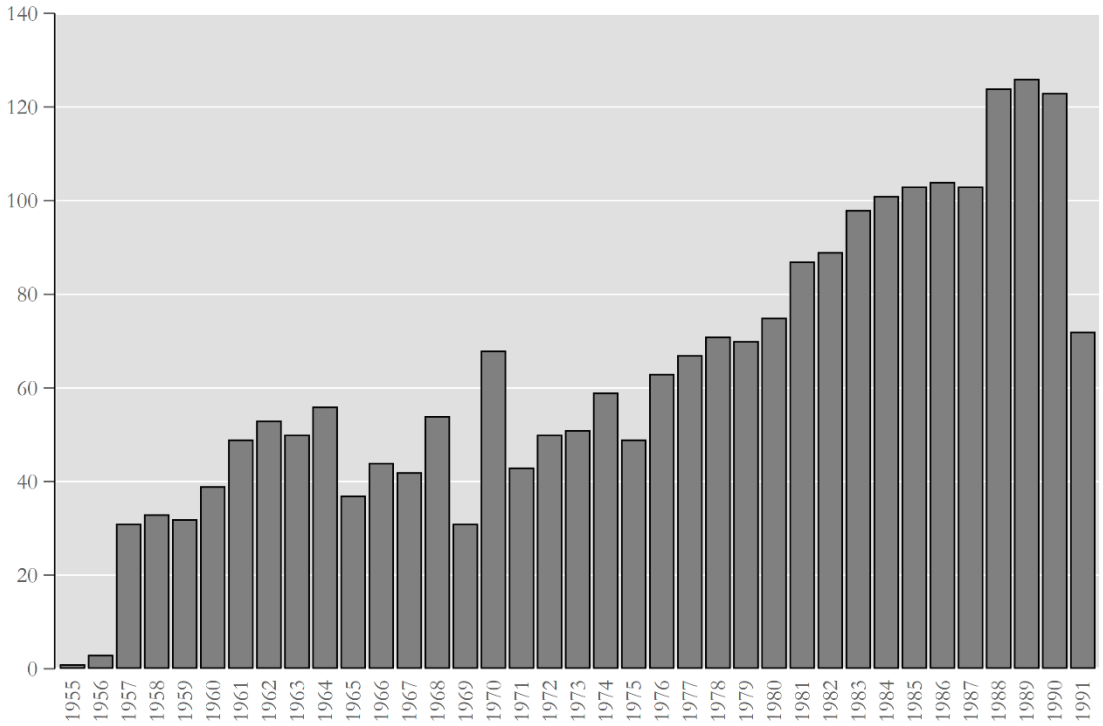


Figure 2. Number of survey respondents per year, 1955-1991

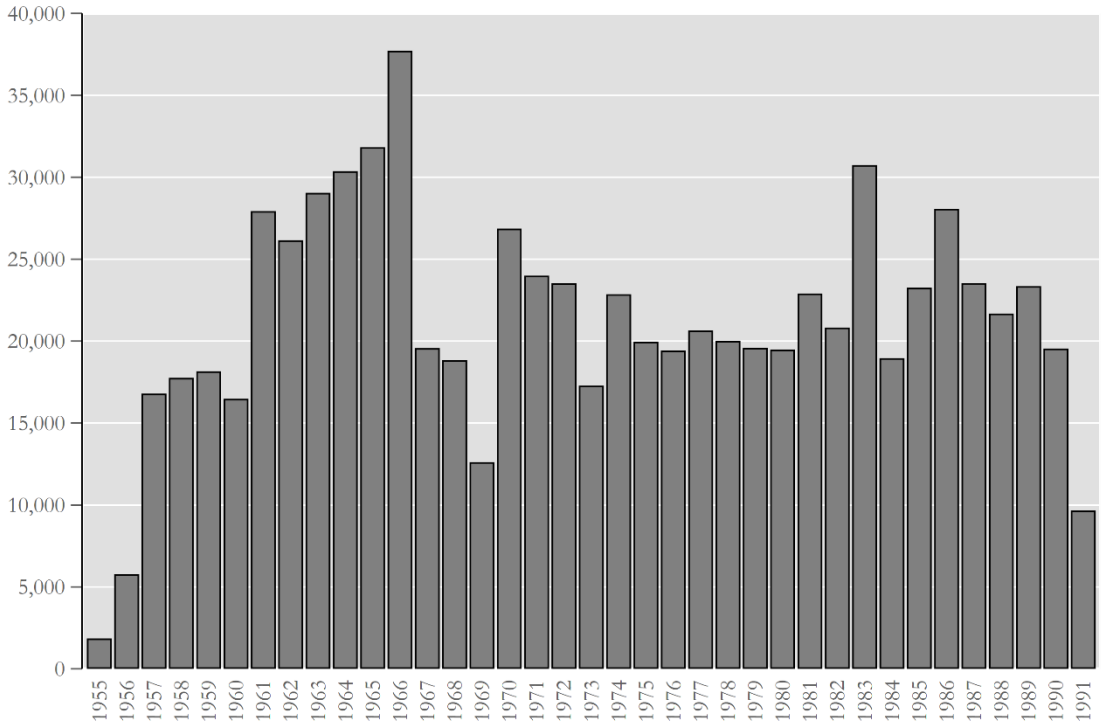


Figure 3(a). Over-65s as a percentage of Gallup poll samples, 1955-1991

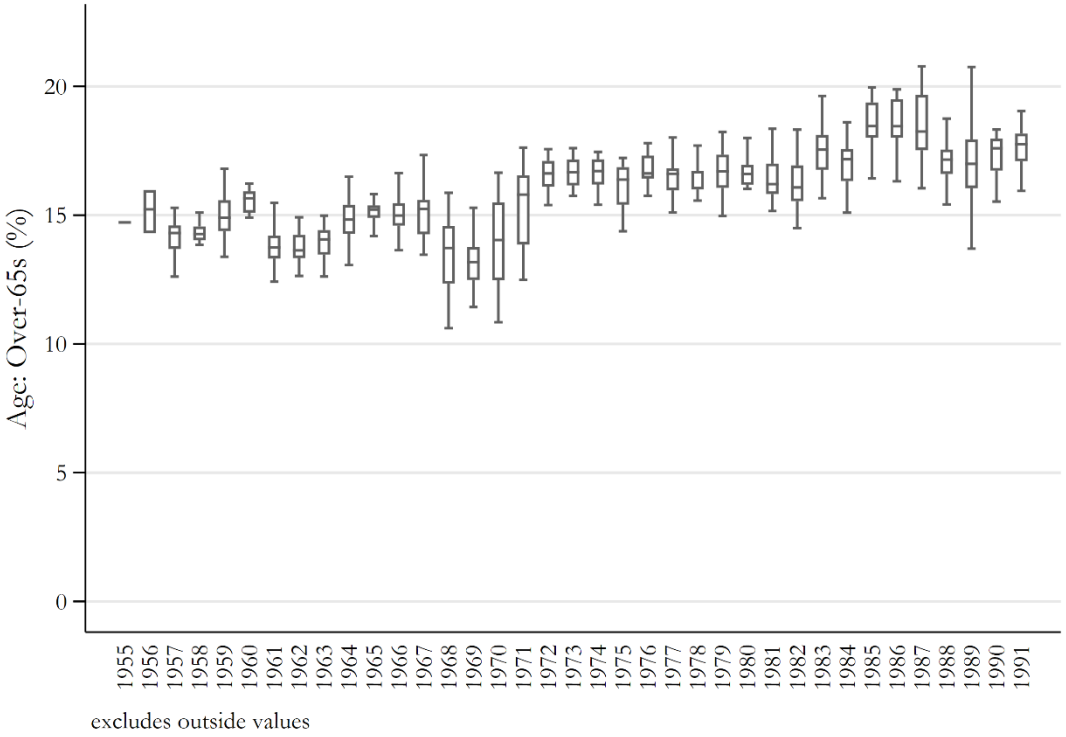


Figure 3(b). Over-65s as a percentage of population estimates for Great Britain, 1955-1991

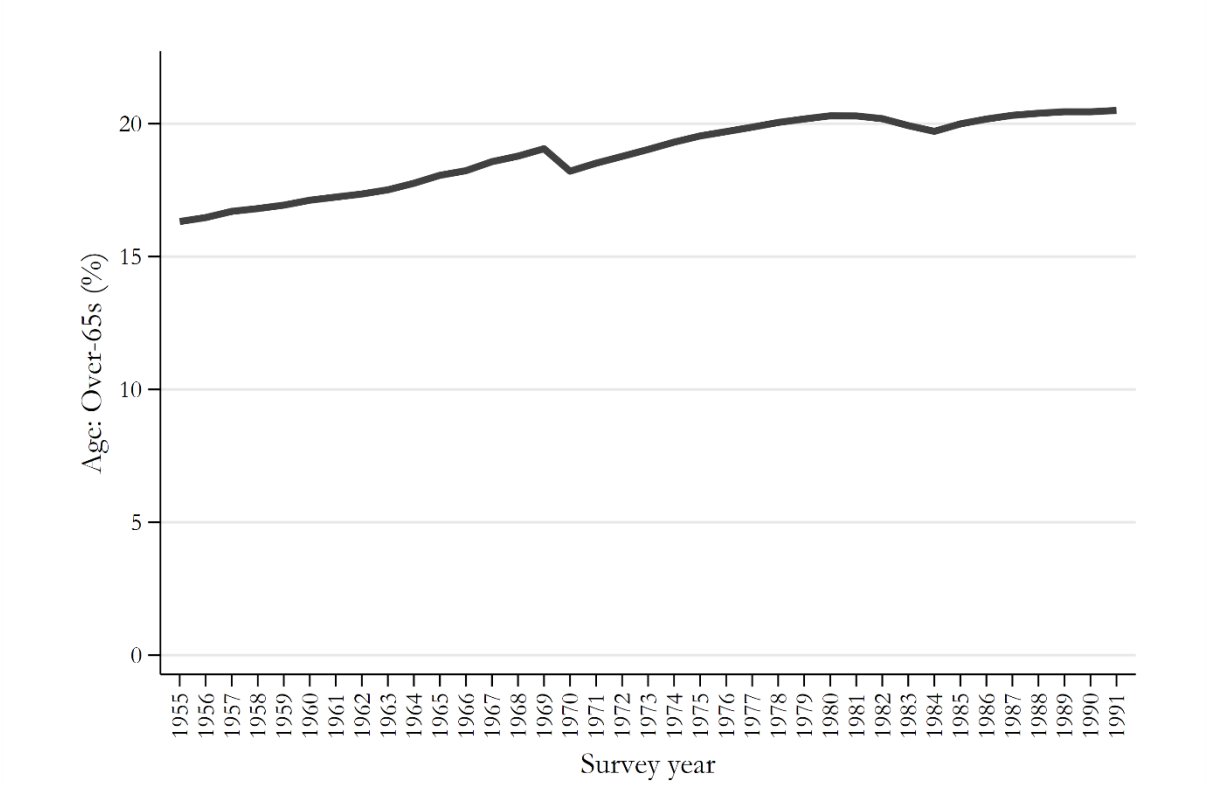


Figure 4. Social class and the Labour vote, 1955-1991 (weighted data)

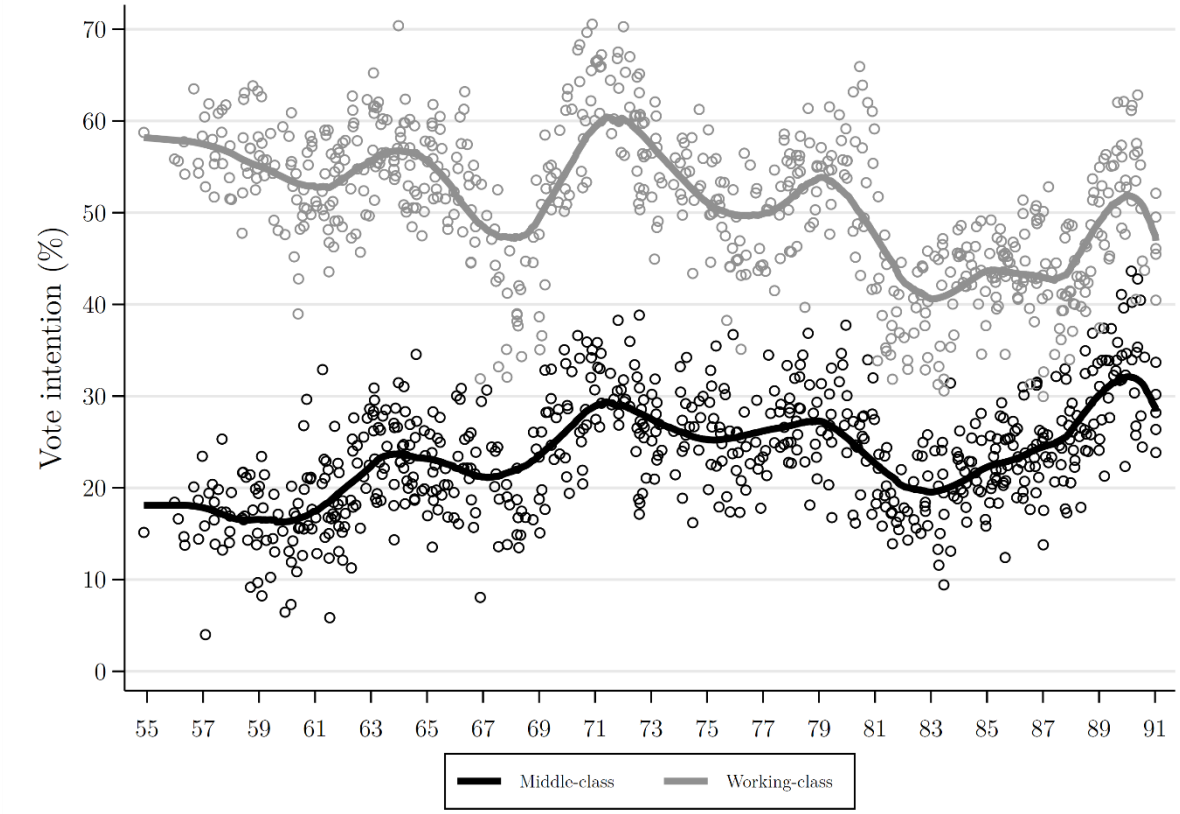


Figure 5. Age and the Labour vote, 1955-1991 (weighted data)

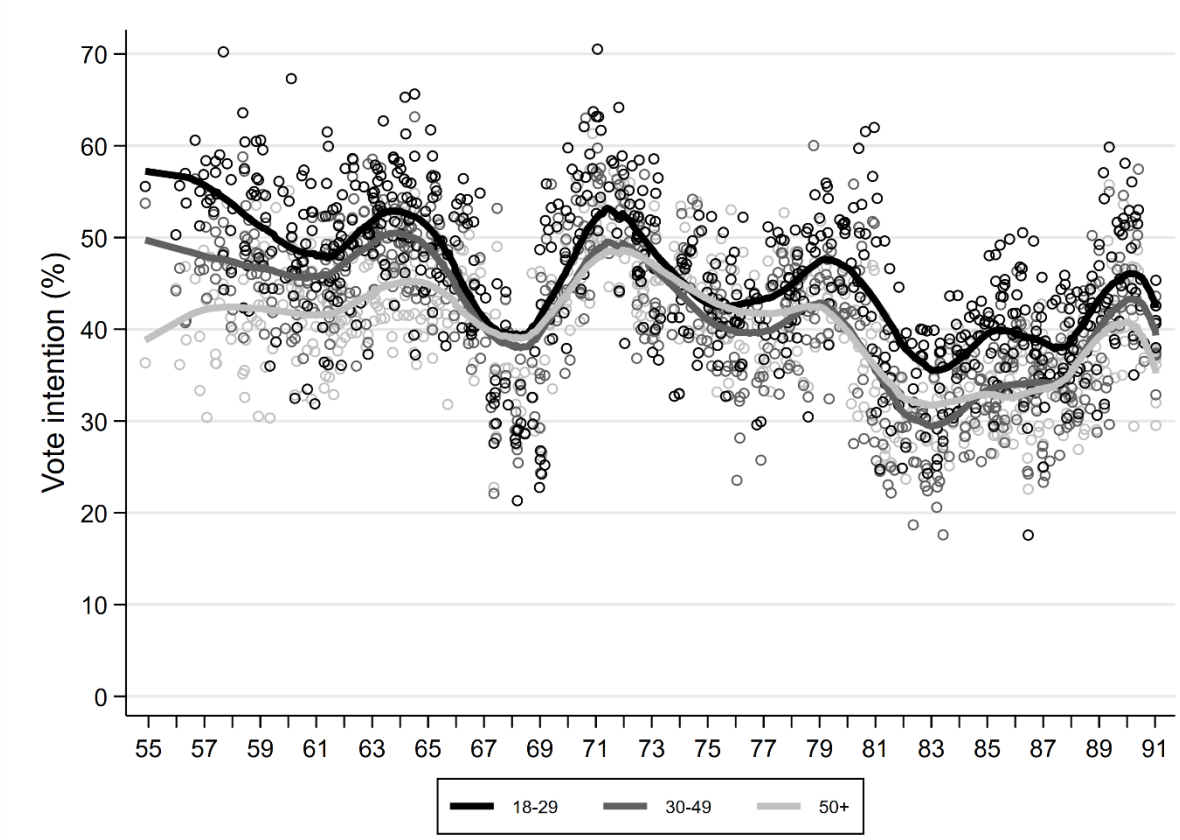
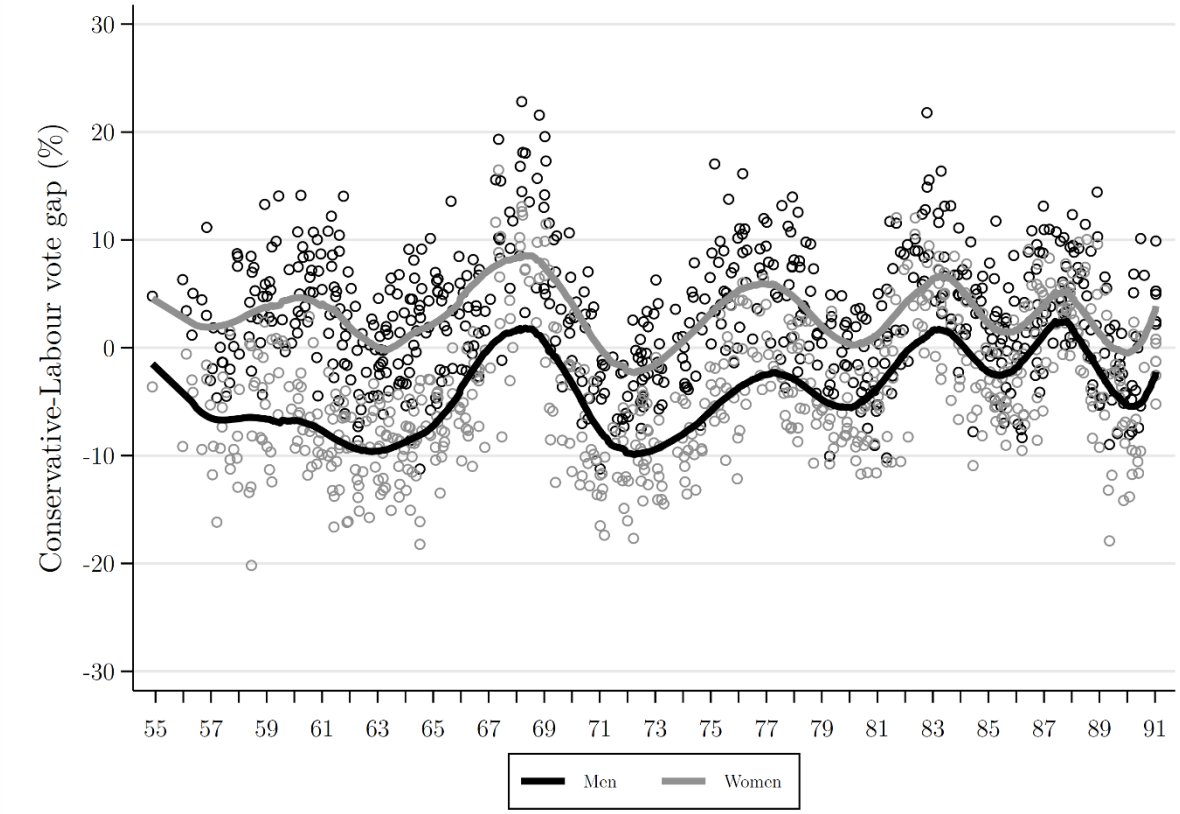


Figure 6. The gender gap in party support, 1955-1991 (weighted data)



Supplementary Appendix:

Revealing long-term trajectories of public opinion and polling in Britain: a new resource of historical data from the British Gallup Poll

Appendix 1: Overview of historical polls in Britain

As noted in the main text, while Gallup data represent the most comprehensive source of British public opinion data since the 1930s, other important data sources also exist. These include the British Elections Study (BES) and its predecessor *Political Change in Britain* which collected data starting in 1963 (see Butler and Stokes 1969; Heath et al. 1991) but these data were largely collected in election years until late in the century, limiting the ability to look at between-election changes, public opinion on significant political and social events, or the details of the opinions of small segments of society given issues of statistical power. A selection of polls from NOP (National Opinion Polls) are available in the UK Data Archive from late 1963 to early 1978 (see Aughterson 1977); while valuable, these cover a much smaller time frame and the density of NOP's surveys were far less than Gallup's. There are also the annual British Social Attitudes (BSA) surveys (see Brook et al. 1992), but these only commenced in 1983. While these are all historically important public opinion data sources, the intermittent nature of the data also illustrates why the near absence of access to the Gallup data has deprived researchers of a key and important resource. These are summarised in Table A1-1.

Table A1-1. Summary of historical survey data in Britain

Survey	Period	Frequency	Sampling information	Study type	Data available at:
Political Change in Britain	1963-1970	1963; 1964; 1966; 1970.	Representative sample of voter population of Great Britain on the Electoral Register in 1963;1964;1966	Cross-sectional & panel	https://www.britishelectionstudy.com/data-object/1963-1970-political-change-in-britain/ , accessed June 22nd 2023
British Election Study	1974-1992	1974 (Feb & Oct); 1979; 1983; 1987; 1992	Representative sample of voter population of Great Britain on the Electoral Register in each of the electoral years	Cross-sectional & panel	https://www.britishelectionstudy.com/data/, accessed June 22nd 2023
National Opinion Polls National Political Surveys	1963-1980	November 1963-December 1977; January 1978; January1980	Two-stage stratified, area cluster sample. For details see the National Opinion Polls publication *Political, social and economic review*, 30, April 1981.	Cross-sectional	NOP Market Research Limited. (1981). National Opinion Polls National Political Surveys; November 1963. [data collection]. UK Data Service. SN: 63002, DOI: http://doi.org/10.5255/UKDA-SN-63002-1- . Studies available at https:https://ukdataservice.ac.uk/, accessed June 22nd 2023
British Social Attitudes	1983-1991	Yearly, except 1988	One-stage stratified or systematic random sample	Cross-sectional and panel (1983-1986)	NatCen Social Research. (2023). British Social Attitudes Survey. [data series]. 3rd Release. UK Data Service. SN: 200006, DOI: http://doi.org/10.5255/UKDA-Series-200006 - available at https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id=200006, accessed June 22nd 2023

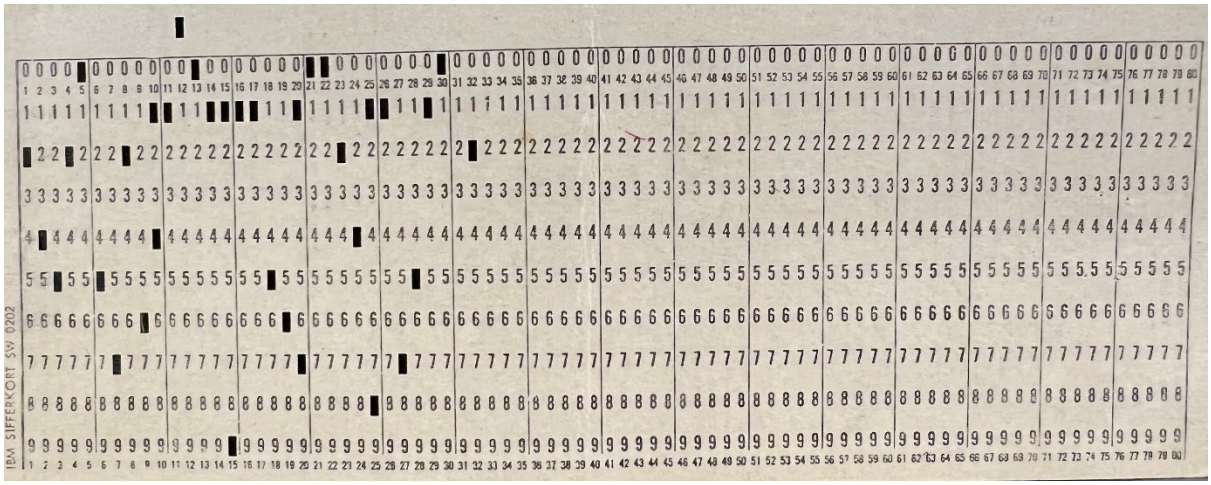
Note: The Archive of Market and Social Research (https://amsr.contentdm.oclc.org/digital/) holds important historical records in the form of research studies, reports and survey results.

Appendix 2: Converting the column binary data

In this section of the appendix, we detail the archived column binary data that we were working with, the process of converting this data to a format that present-day researchers can analyse, and how we overcame some of the challenges that this process involved.

Data in column binary format is based on IBM punch cards with 80 columns and 12 rows, as depicted in Figure A1 below. Responses to a particular survey question could be spread across several different (and unconnected) rows and columns. The same column could also be used for multiple questions, either by using different rows or by using a filter to signal when the same row is used for each question.[1] This makes conversion of the datasets a highly technical and time-consuming task. Originally, well before our project, the punch cards containing the Gallup surveys were read into tapes by IBM punch card readers and were later transferred into digital form by Roper at some point, we would presume, during the 1980s or 1990s.

Figure A1. Card with punches



Source: Roper Center for Public Opinion Research

[1] The filter option was used for multiple card surveys, especially when Gallup used a separate card for the commercial part of the survey which, for proprietary reasons, does not always form part of the Roper archive.

Converting a single dataset from column binary format to a modern-day format (we chose to use Stata for our conversions, from which researchers can easily then use these files to convert to the statistical software package of their choice) can take up to 4 hours. In our conversions, we therefore prioritized converting datasets that included a substantial number of questions relating to social, political or economic topics[2]. Specific priority was given to surveys conducted as part of Gallup's monthly political omnibus (which typically included questions relating to voting intentions, prime ministerial and leader approval, government satisfaction, the 'most important problem' facing the country, the expected winner of the next general election, etc. – i.e. items that were asked regularly over a long time period). There was also a separate economic omnibus survey conducted by Gallup which we have converted in much smaller numbers, though in certain periods (such as the 1970s) economic batteries were additionally included in the political omnibuses. During the conversion process, we also sought recommendations from researchers working in related fields and converted all requested datasets.[3]

Converting the column binary format involves multiple steps. First, the file containing the summary of all punch cards must be converted to a text file so it can be opened and viewed. The second step is to use the questionnaire, any supplementary records and the dataset to figure out which columns and rows have been used for a particular question,[4] whether there is a filter and

[2] Moreover, when batteries within these surveys were purely of a commercial nature – such as for instance on the purchase habits of different food brands – we also did not convert these to focus on material of most relevance to researchers. However, we left the "raw" data for these in the data files for preservation purposes.

[3] We utilized the Roper Center website, social media, and a variety of professional listservs to promote the opportunity for researchers to request surveys to be converted.

[4] On occasion, the punch pattern in the data does not align with the question structure in the questionnaire. This usually occurs when there is a second card superimposed on the first and a filter variable is used to separate the two, but also when the columns assigned to each question in the documentation are incorrect. In the latter case, patterns in the data need to be analysed to see whether the correct columns can be identified.

whether the question is single or multiple choice. Once this is established, one can create new single/multiple choice variables and attribute values to each row. Labels are then created both for the question and for the responses. Sometimes, even if the question suggests a single choice, the dataset might indicate multiple answers for each respondent. In this case, one must make an informed judgment on whether multiple answers were punched in error and label these cases as such, or whether these answers could all be valid and should be coded into separate variables, so that the information is not lost[5].

The next steps involve creating standard names for variables that are repeated over time and producing a codebook of the new dataset. When variables are assigned a "standard variable", these are generally the exact same wording unless the differences are very minor. Where the differences are very minor, such information on the standardised variable is clearly provided in the accompanying documentation to the "mega poll"[6]. Several administrative variables referring to the survey number, month and year plus fieldwork dates (where available) are also added.

[5] For instance, a 1973 survey (CQ868) asks respondents who they would like to see take over leadership of the Labour Party if Harold Wilson retired. While most individuals interpreted this as a single individual, some respondents had multiple punches which may have signalled they preferred multiple candidates. Thus, these were coded into separate variables for each potential candidate to retain this information. In contrast, the one individual that is marked as having responded that Wilson could be described as both 'experienced' and 'inexperienced' in a 1975 survey (CQ948) is clearly an error given that such responses are mutually exclusive.

[6] To provide an example, one standard question asked "Do you think unemployment will go up, go down or remain the same during the next 6 months?". In some surveys, Gallup used "decrease" instead of "go down", yet such changes are unlikely to affect comparability and so we treat them as a standardised question. We recorded five alternative wordings of the question about voting intention: 'In the General Election, how do you intend to vote?' (1955, 1959); 'If there were a General Election tomorrow, how would you vote?' (1956-1961); 'If you were to vote, which party would you support?' (1961-1965); 'If there were to be a General Election tomorrow, which party would you support?' (1965); 'If there were a General Election tomorrow, which party would you support?' (1965-1991). In this case, we

Finally, a completed dataset goes through *quality control*, which involves being checked three times, first by two other project team members and then by the original coder. Each variable was individually checked to ensure that the variable name and the variable label was correct, that there were no spelling errors, and – for the variable name – that it fitted into .dta's 80 character limit without being cut off. Where "xray" card summaries were available detailing the aggregate responses on the column binaries cards, it was also checked that the tabulations of variables matched these. For "standardised variables", checks included making sure that the created standardised variables matched up with the correct variables, and that any questions of a sufficient longitudinal nature were added as standardised variables if they had not already been listed as such. The code was also checked line-by-line in tandem with crosstabulations of variables and the viewings of x-ray files for any errors that may have creeped in this way. A record was maintained on each check for who checked it, what changes were made, and the rationale behind them. These logs were then checked by the team collectively to ensure agreement with the decisions.

Data conversion as detective work

While the conversion process thus follows a specific pattern that, although time-consuming, is in some ways mechanical, there were a number of problems and puzzles that had to be solved for the UK Gallup poll collection in a more creative fashion. Some of these would have been

follow the same approach as King and Wybrow (2001) in their aggregate level reports by merging these together to a single variable as they are measuring substantively the same thing.

However, variants of the vote intention question were sometimes asked either alongside or instead of this question. For instance, how individuals would vote if their vote decided whether the country had a Conservative or a Labour government, or how they would vote if the named parties ran in their constituency. Though the correlations between all these questions were generally extremely high, we have coded these into separate standard variables – even when one of these was asked in a survey and not the regular vote intention question – so that researchers can make the decisions themselves how to take the question wordings into account.

impossible to resolve through converting a single dataset in isolation. But breakthroughs were possible through developing a holistic understanding of the whole data series and documentation from across the time period.

From survey to survey, the data structure of the UK Gallup collection could remain similar for long periods of time. As such, converting multiple surveys from the same period sometimes even allowed for the processing of parts of surveys for which the documentation was missing. The patterns for the administrative columns of a survey, containing information on the number of cards, unique respondent IDs, parliamentary constituency identifiers, filters and survey IDs were eventually easy to recognise and interpret, even when these changed slightly. A key instance of this is the identification of parliamentary constituency code identifiers as discussed in the main article.

Another important example of the detective work required in conversion of the datasets relates to the demographics. The demographic information for surveys carried out between January 1984 and July 1987 was completely lost, mainly because it was contained in a supplementary code sheet which was not placed in the Roper archive. However, during this period there were important changes in how key demographics like occupation were coded, potentially leading to some very serious coding errors. Fortunately, studying the data pattern around these variables and comparing it to versions preceding and succeeding this period gave us a good insight into which version was used and allowed us to avoid coding errors. We assumed that consecutive surveys using the same version of a demographic variable should have the same data structure for that demographic, meaning the data should occupy the same number of rows and have the same distribution between rows.[7] Using this assumption and the information we had on how each demographic looked at the

[7] This assumption was based on the fact that surveys had representative samples and the time period was only three and half years long, thus too short for any major shift to occur in the population structure, along with a number of correlational tests to see whether the relationships between our suspected demographics and other known variables displayed suspected patterns.

beginning of 1984 and in July 1987, we were able to determine exactly when Gallup switched individual demographic variables from the 1984 version to the 1987 one. Luckily, there were no intermediate versions between the two time points for any of the individual demographic variables. Additionally, the coding scheme for some demographics such as interviewer-coded social class did not change during that time and could be used for cross-validation of our results where, for instance, the order of the occupation response options did.

Ancillary information also proved useful in such endeavours. Take, for example, our efforts to locate when exactly surveys took place. Having the fieldwork dates is useful for the research community for a number of reasons. Being able to pinpoint the exact week can permit more fine-grained time series analyses, while knowing the days of fieldwork is valuable when wanting to examine the impacts of specific events that may have occurred during the survey. Gallup recorded the survey dates of each interview in the punch cards up until 1962, but thereafter just noted the day of the week. As it was not until 1984 that the range of field dates for a survey was recorded on the questionnaire, the intervening period was one with some degree of uncertainty over when exactly in the month a survey took place, or indeed whether it occurred at the intersection of two months. Through consulting the original reports of the data in *The Telegraph* archives (Gale 2021), as well as a selection of reported fieldwork dates in King and Wybrow (2001), we were able to locate the missing field dates. What was particularly helpful was where the newspaper article reported a question that was only asked once in that particular month. The questionnaires themselves could also be revealing if they asked individuals about a political event that occurred in the previous week. These dates were further verified by looking at the match between the reported response distribution at the time with what we have in our converted data. This also added an extra layer of validity into the accuracy of our overall conversion process. Moreover, given that most fieldwork was undertaken over a period of 4 to 6 days and punch cards contained information on which day of the week a respondent was interviewed, we were able in many cases to extrapolate the exact date respondents undertook the survey.

Unfortunately, despite our best efforts, there are some pieces of information that we could not reliably identify or recreate due to the archiving process. For instance, open-ended questions were regularly coded-up after the interviews, and the relevant codes added to the punch cards. Though these documents were often contained in the archives, occasionally they were lost or have illegible handwritten notes – sometimes in smudged, photocopied pencil – and so while we know a question and have respondents' answers to them, we have no way to decipher what their responses mean. Moreover, in some surveys, batteries of questions were directed to men or women only (as we discuss further below) and recorded on separate cards; men, for example, were frequently surveyed on their shaving habits. Occasionally, these were not joined together afterwards and only men's or only women's responses were archived, thus leading to an incomplete sample.

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Appendix 3: Questionnaire wordings of key variables

When building standardised trend variables for our mega poll, we followed the Roper Center's policy for when it is appropriate to bring together questions when they have slight variations:

> *"Minor changes to wording unlikely to affect responses will be allowed in some instances. Introductory phrases intended to facilitate the interview process – for example, "moving onto a new topic" or "now I would like to ask you about some issues in the news" – will be ignored in trend-building, and questions including such language these can be included in a trend with other instances of the core questions. Very minor changes to the actual wording of the question, such as "in this country" versus "in the United States," may be allowed in some trends, but will be footnoted. All full question wordings are available in Roper iPoll and in the downloadable trend file available to users at Roper Center member institutions."*

We have discussed some of these decisions in Appendix 2 (see Footnote 6 in-text). In Table A3-1 below, we present illustrations from key variables in our mega poll. The first column indicates the variable names that we have assigned in the data set, the second column provides the exact question wording from the questionnaire, the third column provides the time periods these were asked, and the final column provides our variable codes with the exact labels from the questionnaires.

As can be seen in the "election_win", "vote_intention" and "pm_satisfaction" variables, we deemed the questions here to be appropriately similar for their answers to be comparable. For others, such as age and home ownership variables, the response options are more variegated. We therefore created a range of periodised standardised variables for these which enables researchers to keep the fine-grained detail that may be useful for particular research question when analysing only a portion of the dataset, but also allow users to use higher-level coding classifications to analyse the variables over the entire period. And others still – such as the government approval variable – remained exactly the same throughout the entire period.

These variables are a subset of the ones that are included in our mega poll. The documentation that accompanies the dataset provides full details for every variable.

Table A3-1: Questionnaire wordings of key variables

Variable name	Question Wording	Time Range	Survey identifiers	Variable code
age_v5	NA[8]	1955	IPO1955-434	1 "21-29" 2 "30-49" 3 "50-64" 4 "65 & over"
age_v7	NA[9]	1959	GE1959-1- GE1959-4	1 "21-24" 2 "25-29" 3 "30-34" 4 "35-44" 5 "45-49" 6 "50-64" 7 "65 & over"
age	BA[10]	1956-1965	GBSSLT1956-CQ002- GBSSLT1965-CQ450	1 "16-20" 2 "21-24" 3 "25-29" 4 "30-34" 5 "35-44" 6 "45-49" 7 "50-64" 8 "65+"
age_v2	Can you tell me your date of birth please?[11]	1965- 1969	GBSSLT1965-CQ455 - GBSSLT1969-CQ657	1 "16-20" 2 "21-24" 3 "25-29" 4 "30-34" 5 "35-44" 6 "45-49" 7 "50-54" 8 "55-64" 9 "65+"

[8] Interviewer instructions "Give Actual Age" [Actual age present for this survey]

[9] Standardised wording not provided for interviewers on questionnaire

[10] Standardised wording not provided for interviewers on questionnaire

[11] Interviewer instructions "Write in and code" - the written year of birth was not added to the punchcards

age_v3	Can you tell me your date of birth please?[12]	1969 -1977	GBSSLT1969-CQ657-GBSSLT1977-CQ559	1 "16-17" 2 "18-20" 3 "21-24" 4 "25-29" 5 "30-34" 6 "35-44" 7 "45-49" 8 "50-54" 9 "55-64" 10 "65+"
age_v4	Can you tell me your date of birth please?[13]	1977-1991	GBSSLT1977-CQ567-GBSSLT1991-CQ126	1 "16-17" 2 "18-20" 3 "21-24" 4 "25-29" 5 "30-34" 6 "35-39" 7 "40-44" 8 "45-49" 9 "50-54" 10 "55-59" 11 "60-64" 12 "65+"
better_PM[14]	Who do you think would do the better job as Prime Minister: [CON/LAB leader]	1957	GBSSLT1957-CQ041	1 "Conservative leader" 2 "Labour leader" 3 "Liberal/Liberal Democrat leader" 4 "SDP leader" 999 "DK"
	Leaving on one side the question of which parties they represent, who do you think would make the best Prime Minister?	1965	GBSSLT1965-CQ415-GBSSLT1965-CQ443	

[12] Interviewer instructions "Write in and code" - the written year of birth was not added to the punchcards

[13] Interviewer instructions "Write in and code" - the written year of birth was not added to the punchcards

[14] Up until the February 1974 election, respondents were presented with only the leaders of the Conservatives and Labour. From the October 1974 election, the Liberals were also included and, from 1984, the SDP.

	Who would make the better Prime Minister: [CON/LAB/LIB leader]	1969-1981	GBSSLT1969-CQ652-GBSSLT1981-CQ785	
	Who would make the best Prime Minister?	1981-1991	GBSSLT1981-CQ791-GBSSLT1991-CQ	
classCoded	Interviewer-coded social class - version 1[15]	1955-1967	IPO1955-434 – GBSSLT1967-CQ513	1 "D" 2 "AV-" 3 "AV"4 "AV+"
classCoded_v2	Interviewer-coded social class - version 2	1967-1991	GBSSLT1967-CQ514-GBSSLT1991-CQ126	1 "A" 2 "B" 3 "C1" 4 "C2" 5 "D" 6 "F"
econ_unemploy_prosp[16]	Do you think that unemployment will go up, decrease or remain about the same during the next 6 months?	1957-1958	GBSSLT1957-CQ042-GBSSLT1958-CQ064	1 "Decrease/Go down" 2 "Remain the same" 3 "Go up" 999 "Don't Know"
	Do you think that unemployment will go up, decrease or remain the	1958-1972	GBSSLT1957-CQ042-GBSSLT1972-CQ789	

[15] Appears on questionnaire in reverse order

[16] Each of these questions recoded from the original coding scheme to go from "low" to "high".

	same during the next 6 months?			
	Do you think that unemployment will go up, go down, or remain the same during the next 6 months?	1972-1990	GBSSLT1972-CQ798-GBSSLT1990-CQ048B	
econ_unemploy_prosp_v2[17]	How do you think the level of unemployment (I mean the number of people out of work) in the country as a whole will change over the next 12 months. Will it?	1981-1983	GBSSLT1981-CQ750-GBSSLT1983-CQ896	1 "Fall sharply" 2 "Fall slightly" 3 "Remain the same" 4 "Increase slightly" 5 "Increase sharply" 999 "Don't Know"
econ_unemploy_prosp_v3[18]	Do you consider that the number of unemployed in the next 12 months will?	1972-1989	GBSSLT1972-CQ809-GBSSLT1989-CQ923	1 "Falla lot" 2 "Fall slightly" 3 "Remain the same" 4 "Increase slightly" 5 "Increasea lot" 999 "Don't Know"

[17] Each of these questions recoded from the original coding scheme to go from "low" to "high".

[18] Each of these questions recoded from the original coding scheme to go from "low" to "high".

election_win	Irrespective of how you, yourself, would vote, who do you think will win the next General Election?[19]	1957-1966	GBSSLT1957-CQ39a-GBSSLT1966-CQ462	1. Conservative; 2. Labour; 3; Liberal/Liberal Democrats; 4. SDP (introduced 1981); 5. Alliance (introduced 1981-1988); 6.Nationalists (introduced 1989); 7. Greens (introduced 1989) 10. Other 999. Don't know
	Irrespective of how you, yourself, will vote, which party do you think will win the next General Election?	1967-1991	GBSSLT1967-CQ478-GBSSLT1991-CQ126	
homeOwn_v3	Do you (your family) rent your flat/house or do you rent it?	1955	IPO1955-434	1 "Owned by self/family" 2 "Rented" 3 "Institution/hotel etc"[20]
homeOwn	Do you or your family own your home? <u>If rent</u>: From whom are you renting?	1964	GBSSLT1964-CQ393-GBSSLT1964-CQ395	1 "Own: Buying on mortgage" 2 "Rent from Council/Local authority" 3 "Rent from private landlord" 4 "Employer; with job" 5 "Lodger/boarder" 6 "Hotel; hostel; institution etc"
		1964-1965	GBSSLT1964-CQ401 - GBSSLT1965-CQ450	1 "Own: Buying on mortgage" 2 "Rent from Council/Local authority" 3 "Rent from private landlord" 4 "Employers; with job" 5 "Lodger" 6 "Other [wording not specified on questionnaire]"

[19] Surveys in December 1958 and 1959 refer to possible election in subsequent year rather than using the "next General Election" wording.

[20] "Rented"/"owned by self/family" options inverted from original coding so as to match order in other periods

		1965 - 1975	GBSSLT1965-CQ456-GBSSLT1975-CQ979	1 "Own: Buying mortgage" 2 "Rent from council" 3 "Rent from private landlord" 4 "Employers; with job" 5 "Lodging [with family]" 6 "Hostel etc"
homeOwn_v2	Do you, or your family, own your home or do you rent it?	1975-1991	GBSSLT1975-CQ983-GBSSLT1991-CQ126	1 "Own: Paid for" 2 "Own: buying mortgage" 3 "Rent from Council" 4 "Rent Privately" 5 "Hostel, lodging etc"
gender	N/A	1955 - 1991	IPO1955-434-GBSSLT1991-CQ126	1 "Man" 2 "Woman - housewife" 3 "Woman - Not housewife"
gov_approval	Do you approve or disapprove of the Government's record to date?	1957-1991	GBSSLT1957-CQ041 – GBSSLT1991-CQ126	1 "Approve" 2 "Disapprove" 999 "Don't Know"
marital	NA[21]/Are you?	1955-1965[22]	IPO1955-434-GBSSLT1965-CQ450	1 "Married" 2 "Single" 3 "Widowed, divorced etc"
		1965-1970	GBSSLT1965-CQ456 – GBSSLT1970-CQ728	1 "Married" 2 "Single" 3 "Widowed, divorced"
		1970 - 1991	GBSSLT1970-CQ737 – GBSSLT1991-CQ126	1 "Married" 2 "Single" 3 "Widowed, divorced, separated"

[21] For some of the surveys, only the response categories are listed and not any question on the questionnaire.

[22] The 1955 survey additionally separated Married into "Married with Children under 16" and "Married with no Children under 16". We retain this distinction in a separate variable for those who wish to make use of the distinction, but collapse these two categories together in the 1 "Married" category for this trend variable.

pm_satisfaction	Are you satisfied with […] as Prime Minister?	1957	GBSSLT1957-CQ013	1 "Satisfied" 2 "Dissatisfied" 999 "Don't Know"
	Are you satisfied or dissatisfied with (…] as Prime Minister?	1957-1991	GBSSLT1957-CQ018-GBSSLT1991-CQ126	
unionMember	If employed: Have you a Union Card?	1955	IPO1955-434	1 "Yes" 2 "No"
	Have you (your husband) a Trade Union Card?	1958; 1962-1970	GBSSLT1958-CQ082[23]; GBSSLT1962-CQ280-GBSSLT1970-CQ709	
	Have you [has contact] a Union Card? If so, which Union?[24]	1959-1962	GBSSLT1959-CQ111A -GBSSLT1962-CQ277	
	Have you a Trade Union card?[25]	1971	GBSSLT1971-CQ732	

[23] In this particular survey, respondents were asked both the "unionMember" and "unionMember_v2" questions in different parts of the survey

[24] The exact Union was listed on the response forms that were not archived, but only "Yes/No" answer was recorded on the punchcards.

[25] In this particular survey, respondents were asked both the "unionMember" and "unionMember_v2" questions in different parts of the survey

unionMember_v2	Have you (your husband) a Trade Union Card?	1957-1959; 1970-1974	GBSSLT1957-CQ045-GBSSLT1959-CQ107 GBSSLT1970-CQ714-GBSSLT1974-CQ941	1 "Yes, self" 2 "Yes, husband" 3 "No"
	Do you (your husband) belong to a Trade Union?	1975-1978	GBSSLT1975-CQ944-GBSSLT1978-CQ649	
unionMember_v3	Do you (or your husband/wife) belong to a Trade Union?	1979-1991	GBSSLT1979-CQ652- GBSSLT1991-CQ126	1 "Yes, self" 2 "Yes, husband/wife" 3 "Yes, both" 4 "No"[26]
united_Con	Do you think the Conservative Party at the present time is a united party, or rather still at loggerheads?	1965-1967	GBSSLT1965-CQ426-GBSSLT1967-CQ515	1 "United" 2 "At loggerheads/divided" 999 "Don't know"
	Do you think that the Conservative Party is	1971-1991	GBSSLT1971-CQ770-GBSSLT1991-CQ126	

[26] Up until GBSSLT1987-CQ70A (June 1987) the written codes were 1 "Yes, self", 2 "Yes, husband/wife", 3 "No", with codes 1/2 not being mutually exclusive (e.g. both could be applicable for a respondent). From GBSSLT1987-CQ204 (July 1987), the questionnaires recorded all 4 categories as listed to be mutually exclusive. We have coded the pre-July 1987 period to the latter coding scheme for this trend variable.

	united or divided at present?[27]			
united_Lab	Do you think the Labour Party at the present time is a united party, or rather still at loggerheads?	1962-1970	GBSSLT1962-CQ271-GBSSLT1970-CQ714	1 "United" 2 "At loggerheads/divided" 999 "Don't know"
	Do you think that the Labour Party is united or divided at present?[28]	1971-1991	GBSSLT1971-CQ770-GBSSLT1991-CQ126	
united_Lib_SDP	Do you think that the Liberals and Social	1981-1988	GBSSLT1981-CQ794-GBSSLT1988-CQ811	1 "United" 2 "Divided" 999 "Don't know"

[27] For a subset of surveys – GBSSLT1973-CQ866/GBSSLT1974-CQ915/GBSSLT1974-CQ923/GBSSLT1981-CQ794 - respondents were asked "I want you to tell me for each of these statements whether you think it applies or does not apply to the Conservative Party: United party". We inserted this variable into the united_Con trend variable under the codes "Applies" recoded 1, "Does not apply" recoded 2, and "Don't know" 999.

[28] For a subset of surveys – GBSSLT1973-CQ866/GBSSLT1974-CQ915/ GBSSLT1974-CQ923/GBSSLT1981-CQ794 - respondents were asked "I want you to tell me for each of these statements whether you think it applies or does not apply to the Labour Party: United party". We inserted this variable into the united_Lab trend variable under the codes "Applies" recoded 1, "Does not apply" recoded 2, and "Don't know" 999.

	Democrats are united or divided at present?[29]			
vote_intention	In the General Election, how do you intend to vote?	1955; 1959	IPO1955-434; GE1959-1-GE1959-4	1. Conservative [IPO1955-434; GBSSLT1958-CQ62 - GBSSLT1961-CQ246 with "[Nat-Lib]" afterwards]; 2. Labour; 3. Liberal [up until GBSSLT1988-GBSSLT1988-CQ802]; Social and Liberal Democrats from GBSSLT1988-CQ806 – GBSSLT1989-CQ842; Liberal Democrats [from GBSSLT1989-CQ946]; 4. Social Democrats [from GBSSLT1981-CQ759 –GBSSLT1990-CQ22];
	If there were a General Election tomorrow, how would you vote?	1956-1961	GBSSLT1956-CQ002 – GBSSLT1961-CQ208	
	If you were to vote, which party would you support?[30]	1961-1965	GBSSLT1961-CQ212A-GBSSLT1965-CQ429	
	If there were to be a General Election tomorrow, which party would you support?	1965	GBSSLT1965-CQ432-GBSSLT1965-CQ441	

[29] For one survey –GBSSLT1981-CQ794 - respondents were asked "I want you to tell me for each of these statements whether you think it applies or does not apply to the Alliance between the Liberal Party and the Social Democrats: United party". We inserted this variable into the united_Lib_SDP trend variable under the codes "Applies" recoded 1, "Does not apply" recoded 2, and "Don't know" 999.

[30] Preceded by "If there were to be a General Election tomorrow, how likely is it that you would go and vote"

	If there were a General Election tomorrow, which party would you support?	1965-1991	GBSSLT1965-CQ447-GBSSLT1991-CQ126	5. Alliance [from GBSSLT1982-CQ808 – GBSSLT1988-CQ802]; 6. Nationalist (Welsh/Scottish) [from GBSSLT1968-CQ567]; 7. Greens [from GBSSLT1988-CQ811]; 9 British National Party [GBSSLT1979-CQ667]; 10 Other 999. Don't know *While the order of the first three parties was always the same, depending on the period the appearance/disappearance of parties changed the order of the other parties. This coding scheme presented is the way that we have coded the response categories in the mega poll to ensure consistency across the time periods. In our coding, the missing "8" belongs to "Communist Party", but this was never asked in the vote intention question; only once in a partisanship question in 1977 (after which it was immediately dropped as a response category in the next survey).*
wt_duplicate_multiple	Marker for whether a duplicate weight was used by Gallup	Primarily until CQ668 (1970)		0 "Not duplicated" 1 "1 duplicate" 2 "2 duplicates" etc

Appendix 4: Coding of social class

Interviewers coded respondents based on their occupation into social classes. In the original 4-category scheme developed by the British Institute for Public Opinion (BIPO), used by Gallup between 1955 and 1967, these were coded as 'AV+' (well-to-do: those in higher professions with their own telephone, car and domestic help), 'AV' (middle and upper classes: professionals not in the highest group, such as teachers and shop managers), 'AV-' (lower middle and working class: manual workers, shop attendants), and 'D' (very poor: unskilled labourers and manual workers, those living only on an old age pension). Retirees were coded according to their former profession, wives according to the occupation of their husband and students according to the profession of their parent(s). In 1967, Gallup switched to the 6-category social grade classification developed for use on the National Readership Survey (NRS), coding respondents as 'A' (higher managerial, administrative and professional), 'B' (intermediate managerial, administrative and professional), 'C1' (supervisory, clerical and junior managerial), 'C2' (skilled manual workers), 'D' (semi-skilled and unskilled manual workers), 'E' (state pensioners, casual workers, unemployed with state benefits).

The surveys also included a question on which class people *identified with*: "If you had to say which social class you belong to, what would you say?" with the possible options ranging from "Working", "Lower-middle", "Middle", "Upper-middle" "Upper", and "Don't know". See Evans et al. (2022) and Macfarlane (2022) for a discussion of how the political effects of class identity are distinct from class measures based on occupation, as those who are in a middle-class occupation may still identify as working class.

Appendix 5: Population targets for weighting the Gallup data

Our weighting scheme identifies appropriate population benchmarks from external sources that match demographic variables in the Gallup surveys, where reliable and consistent data is readily available. The variables we selected are age-by-sex, region, social class, and union membership. The data sources and coding are summarized in Table A5-1. We generate our weights through iterative proportional fitting, or 'raking', to produce a calibrated set of survey weights that match population totals (using 'ipfraking' in Stata, Kolenikov 2014). To enable convergence of the algorithm we used 10 iterations and a tolerance of 0.001, which brought the values within a couple of decimal points of the population totals.

Table A5-1. Population benchmarks for weights, 1955-1991

Variable	*Source*	*Targets*	*Start*	*End*
Age by sex	Office for National Statistics	Male, Female; 21-29/18-29* 30-49 50-64 65+ **Depending on voting age*	1955	1991
Region	Annual Abstract of Population statistics	South, North, Midlands, Wales Scotland	1955	1991
Social class: occupation	National Readership Survey	Social grades (A, B, C1, C2, D, E)	1955	1991
Trade union membership	Bank of England (Department for Employment, 1892-1973; Certification Office, 1974-2015).	% of employment	1955	1991