The Mismeasurement of Strikes and the Distortion of Protest Trends: Evidence from Britain in the 1980s and 1990s

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The literature on political participation asserts that protest has increased over the last four decades, in most countries. The trend is derived from surveys asking about participation in various types of protest, including demonstrations, boycotts, and strikes. The latter question covers only ‘unofficial’ strikes, which made sense in the context in which it was formulated, Britain in the early 1970s, and with regard to the original theoretical aim, measuring ‘protest potential’. The absence of a general question on strikes, however, distorts our understanding of participation in protest. This is shown using two sources of data on Britain in the 1980s and 1990s—surveys of individuals and catalogues of events—which comprehensively measure strikes. In both sources, participation in strikes greatly exceeds demonstrations. Adequately measuring strikes overturns two accepted findings about the characteristics of protesters, that they are highly educated and Postmaterialist. Official statistics show a dramatic decline of strikes in Britain, as in many other countries, since the 1980s. This decline offsets the increase in demonstrations and boycotts, making it implausible that the total volume of protest has increased. The episode illustrates how a set of survey questions, when widely replicated, can construct the phenomenon investigated by social scientists.

Protest is on the rise. There is ‘an international trend towards rising rates of unconventional or elite-challenging behavior’ (Inglehart 1997: 312); ‘the proportion of citizens engaged in protest politics has risen, and risen dramatically, during the late twentieth century’ (Norris 2002: 197); ‘more challenging protest activities display a marked increase from 1975 to the present’ (Dalton 2008b: 90); ‘the citizenry exhibits a growing readiness for, and actual participation in, various forms of protest’ (Rucht 2007: 713); ‘since the 1970s there has been a dramatic rise in the number of people claiming to have engaged in protest’ (Saunders et al. 2012: 263). In short, we now live in a ‘social movement society’ (Neidhardt and Rucht 1993; Meyer and Tarrow 1998). The rise in protest is generally welcomed because it offsets declining participation in electoral politics (e.g. Power Inquiry 2006: 48-9; Dalton 2008a: 71). The trend of increasing protest, widely accepted in sociology and political science, derives from population surveys carried out since the early 1970s. A standard battery of questions

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asks whether the respondent has ever taken part in particular types of protest, such as a lawful
demonstration or an unofficial strike. Only a minority of adults have undertaken any of these
actions (aside from signing a petition), but this proportion has increased over time in most
countries, including Britain.

This apparent trend, I will argue, is illusory. The standard battery does not properly
capture participation in strikes, and so misses the bulk of protest actions. Strikes are the one
form of protest on which governments collect statistics (Franzosi 1989). These statistics show
that strikes have declined dramatically since the 1980s in Britain and many other countries.
The decline in strikes more than offsets the increase in the particular forms of protest captured
by survey questions. The notion of a ‘social movement society’ is sustainable only if we
ignore the decline of the labour movement. My argument rests on two sources of evidence
from the 1980s and 1990s. The British Social Attitudes (BSA) survey is exceptional for
including questions on strikes as well as demonstrations. European Protest and Coercion Data
provide a comprehensive catalogue of events, including the number of participants. Both
sources demonstrate that strikes dominated other forms of protest actions.

Omitting strikes not only distorts our view of trends in protest over time. It also paints a
misleading portrait of the typical protester in two related respects. One is the tendency ‘for the
better educated to engage in protest’ (Dalton 2008a: 69); ‘education proved by far the best
predictor of experience of protest politics, followed by social class’ (Norris 2002: 201); ‘it is
those who are formally the most advantaged who are the primary base of protest whereas
those who have no educational qualifications are the most quiescent’ (Parry, Moyser, and Day
1992: 75; see also Kaase 1990: 37). This association has been dubbed an ‘iron law’ (Rucht
2007: 715). A second characteristic is value orientation: whether someone is a Materialist,
prioritizing physical and economic security, or a Postmaterialist, prioritizing self-expression
and intellectual and aesthetic satisfaction. ‘‘Postmaterialists are much more likely to engage in
unconventional political activities than are Materialists’’ (Inglehart 1997: 312); ‘postmaterial
values stimulate participation in citizen initiatives, protests, and other forms of direct action’
(Dalton 2008a: 92; see also Jennings and van Deth 1990: 350). In both respects, as the BSA
survey reveals, the pattern is reversed for strikes. If both types of action are combined to
create a more comprehensive measure of participation, then neither education nor
Postmaterialism significantly increase protest.

The definition of ‘protest’ requires some preliminary remarks. The term is sometimes
used narrowly—with an indefinite article—to refer to a particular type of gathering,
synonymous with a march or a demonstration (e.g. Caren, Ghoshal, and Ribas 2011). The
term is also used more broadly, to refer to collective action combining the expression of
grievance and the demand of a change in policy by a powerful adversary. In this sense it is
differentiated from more institutionalized means of exercising political voice, classically
voting; it is also commonly differentiated from lethal violence. This paper uses the broader
concept, as specified or implied in the literature quoted above, focusing on ‘confrontational tactics such as marches, strikes, and demonstrations that disrupt the day-to-day life of a community’ (Taylor and Van Dyke 2003: 263; see also Piven and Cloward 1977: 3-4). Such actions are costly for the participants: strikers lose wages, demonstrators give up time (and usually pay for travel); participants sometimes risk steeper costs, such as arrest or injury. Even a boycott has a cost in as much as the purchaser foregoes the best product. The element of significant cost differentiates these actions from signing a petition, which takes less than a minute.\(^1\) The divergence of petitioning from other types of action is revealed by factor or principal components analysis (Parry, Moyser, and Day 1992: 51; Pattie, Seyd, and Whiteley 2004: 134). Most British adults have signed a petition, whereas the other protest actions are genuinely unconventional. It should be emphasized, though, that my intention is not to impose a particular definition of protest, but rather to show how a particular set of survey questions came to define the phenomenon, which had the unintended consequence of mismeasuring strikes.

The subject of this paper is Britain, because the survey questions were originally formulated there, and the country experienced significant protest from the 1970s to the 1990s (Rootes and Saunders 2005). (Northern Ireland, dominated by violence between competing national identities, is excluded.) In the early 1970s, mass strikes challenged the government’s attempts to curb the power of the labour movement; the general election of 1974 was precipitated by a miners’ strike. In the late 1970s, widespread strikes stoked wage inflation and led to the severe disruption of ordinary life, exemplified by power cuts and uncollected rubbish. The miners’ strike in 1984 concentrated resistance to the Conservative government’s economic restructuring. The government’s foreign policy was challenged by the anti-war movement, famously in the women’s camp outside the Greenham Common airforce base, started in 1981. The environmental movement used new forms of direct action to resist the government’s motorway programme. Finally, the government’s new poll tax provoked in 1990 ‘the most widespread campaign of civil disobedience seen in Britain in the twentieth century’ (Rootes 2003: 142; see also Bagguley 1995).

The paper has three parts. The first traces the genealogy of the standard battery of questions, and compares survey data to official statistics on strikes. The second section analyses the BSA survey in 1986 and 1989, when it asked about strikes as well as demonstrations. The third section examines data on protest events from 1980 to 1995.

\(^1\) In nondemocratic states, by contrast, petitioning is costly because public dissent will draw retaliation.
1. Surveying protest

After the Second World War, population surveys transformed the study of electoral politics; public opinion could be measured, or perhaps constructed, scientifically (Osborne and Rose 1999). The same tools could be applied to protest. Surveys were initially undertaken of participants in protest or in movement organizations (e.g. Parkin 1968), and such surveys have continued (Saunders et al. 2012). In order to compare the characteristics of participants with those of non-participants, however, it is necessary to sample from a population or subpopulation. An early example was a sample of black university students in the American South in 1962, asking whether they had taken part in sit-ins against segregation (Biggs 2006). The sit-ins were the harbinger of a wave of protest that transformed politics in the 1960s. In Britain there was nothing comparable to the Civil Rights movement in the United States or to 1968 in France, but the Campaign for Nuclear Disarmament (Parkin 1968) and the Vietnam Solidarity Campaign (Thomas 2002) had a major political impact. This phenomenon demanded scientific investigation using population surveys. The most ambitious project was the Political Action Survey (PAS), launched in 1971, eventually involving eight countries (Barnes and Kaase 1979; Barnes et al. n.d.). Alan Marsh—a PhD student at the London School of Economics and Political Science—played a leading role, pioneering the survey questions which came to dominate the field.

Compared to voting, protest—or ‘unorthodox political behaviour’, as PAS preferred—poses problems for survey methods. Such actions ‘occur irregularly, infrequently, and in specific, often local, contexts of mobilization’ (Barnes and Kaase 1979: 42). Most obvious was the numerical problem. Because unorthodox political action is (by definition) confined to a small minority, this increases sampling error. In a sample of a thousand adults, for example, if only 25 have participated in an occupation, then the comparison between participants and non-participants will lack statistical power. Marsh (1974) therefore developed a scale of ‘protest potential’: respondents were asked whether they had taken part in various types of protest within the last ten years, whether they would do so, and whether they might do so.2 (A similar scale was constructed in parallel by Edward Muller; e.g. Muller 1979.) This neatly overcame the problem of small numbers: only 6% of adults in his survey had taken part in a lawful demonstration in the preceding ten years, but a further 51% said that they would or might do so (Marsh 1977: 45).3

Aside from numbers, there is the problem of a definition. Formally, PAS defined unorthodox or unconventional political behaviour as ‘behavior that does not correspond to the

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2 ‘Potential’ had a theoretical motivation too, as Marsh was contesting the stereotype that the British were deferential (Almond and Verba 1963); willingness to protest would count as contrary evidence.

3 Rootes (1981) observed that this measure tends to underestimate the potential of protest by the working class.
norms and customs that regulate political participation’ (Barnes and Kaase 1979: 41). No rules or laws ‘encourage the regular occurrence of street protests, demonstrations, boycotts, rent strikes, political strikes, the occupation of administrative premises and so on’ (Marsh 1977: 39). The obvious objection is that many types of protest are defined and protected by law; certainly almost all instances of protest conform to norms and customs. What proved extraordinarily influential was not the definition but the list of specific actions given to respondents (Marsh 1977: 45; cf. 1971: 110). These actions were selected to be arrayed on a unidimensional and cumulative scale of protest potential; respondents physically sorted set of cards each marked with a protest action. ‘At one end of this continuum are mild forms of protest like signing petitions and peaceful marches, at the other end are extreme forms of deliberate damage to property and the use of personal violence. Between these extremes are ordered: demonstrations, boycotts, strikes, occupations, and similar activities’ (Marsh 1976: 18). As evidence of the influence of this scale, Marsh’s (1977: 42) diagram is reproduced in a leading textbook which has gone through five editions (Dalton 2006: 65).

What interests me is the treatment of strikes. Marsh’s preliminary exploration in 1972 included strikes as one of the ‘stimulus examples’. This was subsequently changed to refer to a particular type: unofficial strikes (Marsh 1974: 109-10). As Marsh now recollects, ‘pilot respondents themselves queried whether we meant official or unofficial (or “wildcat”) strikes and it seemed to me that unofficial strikes had become a touchstone of unorthodox political action in contrast to the more orthodox official actions’ (personal communication, 31 Jan 2013). An unofficial strike is formally one that ‘takes place contrary to union rules and contrary to agreed procedures’ (Eldridge and Cameron 1964: 35). Note there is no implication that it breaks the law. An unofficial strike may be legal; an official strike may be illegal.4 The distinction between official and unofficial is inherently vague: what begins as an unofficial strike can be retrospectively endorsed by the union leaders, and thus deemed official; experts differentiate between ‘official unofficial’ and ‘unofficial unofficial’ strikes (Crouch 1978: 226). Clearly the unofficial strike is a slippery category of action. Its meaning and importance can be understood only in the particular context of Britain in the early 1970s.

Unofficial strikes emerged—or were constructed—as a social problem in the 1960s. Indeed, criticism of this particular tactic was sufficiently strident to be rebutted in the British Journal of Sociology (Eldridge and Cameron 1964). The Donovan Commission, established to investigate conflict between labour and capital, claimed that ‘95 per cent of stoppages are unofficial, and unofficial strikes are becoming more common’; it warned that ‘the economic consequences are obvious and serious’ (Royal Commission 1968: 266-67). The legislative solution pursued by the Conservative government was the Industrial Relations Act of 1971, fiercely opposed by trade unions (Moran 1977). Amongst other provisions, the Act removed

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4 Muller’s contemporaneous (1979: 41, 299) survey of protest in Germany asked about wilden Streik (wildcat strikes), which he also assumes to be illegal.
legal protection from unofficial strikes: trade unions would be liable for ensuing economic damages. In the spring and summer of 1972, the new National Industrial Relations Court was tested by a case involving the unofficial ‘blacking’—refusal to handle goods—and picketing by dock workers. The result was a protracted and almost farcical saga, culminating in the imprisonment of five shop stewards, provoking massive strikes and proving the new system to be unworkable. In this context, we can understand why Marsh isolated unofficial strikes to construct the cumulative scale of protest potential: they ‘mark a third threshold position, wherein the question of conscious illegality arises’ (Marsh 1977: 41-43)—in his thesis the sentence continues, ‘especially since the Conservative Government was still pursuing its anti-strike legislation at the time of the survey’ (1976: 53). The Act was fatally weakened by the end of 1972, and was finally repealed in 1974. By then, as we will see below, the profile of strikes had been transformed.

Marsh’s question on unofficial strikes has transcended its original historical context and specific methodological purpose, to enter the pantheon of survey questions. PAS questions were, with minor modifications, adopted by the World Values Survey (WVS). The standard battery asks whether the respondent has ever undertaken five ‘forms of political action’: signing a petition, joining in boycotts, attending lawful demonstrations, joining unofficial strikes, and occupying buildings or factories. (The latter two actions were dropped in the fifth wave.) These questions have now been asked in over ninety countries, from Albania to Zimbabwe, and consistently from 1981 onwards. They therefore constitute the most important source of data for analyses of protest participation at the population level. Some analyses continue to examine ‘protest potential’, combining what respondents have done with what they say they would or might do. Most recent studies focus on reported past actions, usually summed to make an index (e.g. Dalton, Van Sickle, and Weldon 2009) or divided into a dichotomy of one or more actions versus none (Corcoran, Pettinicchio, and Young 2011). No longer are these types of protest justified as thresholds on a unidimensional and cumulative scale. It is assumed that ‘these five examples tap the most common forms of collective action’ (Dalton, Van Sickle, and Weldon 2009: 61). Whereas social scientists in the 1970s spent pages conceptualizing their object and justifying their measurements, now the standard battery of questions are treated as defining protest.

WVS differs from PAS in one respect, extending the time horizon from ‘during the past ten years’ to ‘ever’. This helps mitigate the methodological problem of small numbers. The temporal difference is curiously missed in the literature on political participation, which juxtaposes PAS with WVS as if the proportions were commensurable (e.g. Dalton 2006, p. 68; Norris 2002, p. 197). The apparent increase in participation between the early 1970s and early 1980s is an artifact, at least in part. Logically, more people will report ever having done something than will report doing it in the past ten years.
Figure 1 shows responses to WVS questions (petitions excepted) for Britain, with 95% confidence intervals, from 1981 to 2005.\textsuperscript{5} Over the quarter of a century spanned by WVS, boycotting and demonstrating show an increasing trend ($p < .001$).\textsuperscript{6} This is the chief source of evidence, in Britain as in other countries, for protest becoming more common in recent decades.

A very different trajectory is shown by the state’s statistics on strikes and lockouts, now dubbed ‘labour disputes’. These statistics are confined to disputes over terms of employment, thus excluding strikes for other goals (a point to which we will return). Figure 2 shows the number of workers directly involved in disputes which began each year.\textsuperscript{7} The series is denominated by the adult population (rather than the number of employees, as is usual) for greater comparability with surveys. The series fell by three quarters from the 1960s and 1970s to the 1990s and 2000s. PAS and WVS ask only about unofficial strikes, of course. Figure 3 differentiates workers involved in stoppages ‘known to be official’.$^8$ This series was first published in 1972 (extended back to 1960; figures had been provided to the Donovan Commission). The date indicates heightened concern over unofficial strikes coinciding with Marsh’s research. However, ‘serious practical difficulties in defining stoppages as unofficial’ ($\text{Department of Employment Gazette}$ 1972: 810) meant that the only other category was a residual also including lockouts, strikes by non-unionists, and strikes whose status was unclassified (Silver 1973: 101). The differentiation of official strikes ended in 1980, due to practical difficulties—and presumably also to the waning importance of unofficial strikes. The graph shows the ten years about which Marsh’s respondents were queried, 1964 to 1973. According to his survey, 4-6% of the adult population had joined an unofficial strike (ranges indicate 95% confidence intervals). In these ten years, perhaps twice as many workers were involved in unofficial strikes as in official ones. But these years notably exclude the twin peaks of the twentieth century, 1962 and 1979, when official strikes predominated.

We want to investigate participation in strikes, not merely unofficial ones. Unofficial strikes were politically salient in the 1960s because of the putative damage they inflicted on Britain’s economy. But the most contentious disputes, which brought workers into

\textsuperscript{5} Variables are $e026$ to $e029$. All calculations from WVS are weighted by $s017$.

\textsuperscript{6} Trends are estimated by logistic regression with year as independent variable. All $p$-values reported in the paper are two-tailed.

\textsuperscript{7} These figures include Northern Ireland, which contributed less than 3% of the total workers involved in disputes in progress during the year. There is no regional breakdown of the series preferred here, confined to workers \textit{directly} involved in stoppages \textit{beginning} in the year. Note that official statistics omit stoppages involving fewer than ten workers and lasting less than a day, unless the total number of working days lost is one hundred or more.

\textsuperscript{8} Figure 3 differs from Figure 2 by including workers \textit{indirectly} involved in labour disputes—who did not strike, but were thrown out of work by a strike in their establishment. Workers indirectly involved comprise 17% of total workers involved in this period.
confrontation with the state, were official strikes. As Crouch put it, the ‘sudden escalation of conflict in Britain’ in the early 1970s was due ‘not to a sudden rash of unofficial strikes (their increase has been a gradual post-war development which began to attract political attention from the mid-1960s onwards), but to a series of long official strikes which were in part a response to government action’ (Crouch 1978: 229; see also Silver 1973: 98). Indeed, in 1971 a strike against the Industrial Relations Bill involved up to 2 million workers (almost 5% of the adult population); this is excluded from the statistics on labour disputes. Other tumultuous official strikes include the 1972 miners’ strike, which provoked the government to call an election; the 1984 miners’ strike; the Wapping strike against News International in 1986—all three led to pitched battles between picketers and police. Hypothetically, workers who joined official strikes might at other times have joined unofficial ones, which would mean no difference between the proportion of adults having taking part in all types of strikes and the proportion having taken part in unofficial ones. Statistics on labour disputes cannot resolve this question. The number of strikers in a year exceed the number of individuals who struck in that year, because some will strike more than once. More seriously, there is no way of knowing to what extent strikers in different years are the same individuals. What is needed is a survey asking about participation in strikes.

2. Survey data, 1986 and 1989

There were major surveys of British political participation in 1984 and 2000. These asked respondents about their participation in particular kinds of strike over the past five years and twelve months respectively (Parry, Moyser, and Day 1992; Pattie, Seyd, and Whiteley 2004). The divergent time horizons do not allow comparison with WVS. The best source is the BSA survey, which from 1983 to 1990 (excepting 1988) asked whether the respondent had ever gone on strike. The question was asked only of respondents who had belonged to a union at some point in their lives. The remaining 43% of respondents must be treated as never having gone on strike, which will lead us to underestimate the proportion (though the discrepancy is surely small). Pooling all years (there is no statistically discernible difference among them), we estimate that 19-20% of the population had participated in strikes. This is more than double the WVS proportion for unofficial strikes, 7-9% (pooling 1981 and 1990). The obvious reason for the difference is that many people have taken part in official strikes but not

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9 This figure is from an academic source (Gennard 1971: 258); the Department of Employment Gazette (1972: 438) informally estimated 1.25 million.

10 The number of individuals was published until 1967; it ranged from 55% to 93% of the total workers involved (Silver 1973: 99).

11 Variable is union4. Calculations from BSA are weighted by wtfactor, except the factor analysis used to construct the Postmaterialism scale. Note that BSA includes respondents aged 18 and over, while WVS starts at 15 years.
unofficial ones. In addition, respondents who have been on strike might have difficulty deciding—some years or even decades later—whether that strike was unofficial or official. After all, this distinction proved impractical even for government statisticians. Whatever the reasons, clearly the question on unofficial strikes greatly underestimates participation in strikes. More people reported striking than taking part in any other type of protest (aside from signing petitions, of course).

With this comprehensive measure of strikes, we should compare it with the typical question on demonstrations. The BSA asked about reactions to ‘a government action which you thought was unjust and harmful’: one action is having ever gone ‘on a protest or demonstration’. Figure 4 traces the proportion having participated in anti-government demonstrations (as the question will be abbreviated), comparing the similar question in WVS.\textsuperscript{12} The BSA’s formulation elicits fewer positive responses. The difference is obviously due to the exclusion of protest against targets other than the state; respondents may also interpret the question as excluding protest against foreign governments—in this period, South African Apartheid and America’s foreign policy were particularly contentious. Nevertheless, in the period of overlap with WVS (excluding 2011), the BSA question shows a similar and statistically significant ($p < .001$) trend upwards.

BSA asked both about strikes and about anti-government demonstrations in 1986 and 1989.\textsuperscript{13} (Response rates were 70% and 69% respectively.) Of the total sample, 76% had done neither; 17% had struck but not demonstrated against the government; 4.6% had done the latter but not the former; 2.5% had done both. The overlap between categories is surprisingly low, given that so many strikes in the 1970s and 1980s targeted the government directly—in nationalized industries or public services—or indirectly—as an ally of employers. Using these two years, we can investigate the individual characteristics associated with participation in anti-government demonstrations and in strikes. Some characteristics—such as belonging to a trade union or adhering to the Left (e.g. Dalton 2008a: 69)—will be associated with both forms of protest. For others, however, we would expect contrary effects. Although the literature asserts that education increases protest, we would suspect that this effect is much diminished or even reversed for strikes. We also suspect a contrary affect for Postmaterialist values.

Multivariate analysis will proceed in two stages. We begin with objective characteristics, which can be treated as exogenous. Of paramount interest is education. The respondent’s highest educational qualification was recorded in six ordinal categories (plus foreign and other qualifications, only 0.6% of the sample). An important control is age, which

\textsuperscript{12} Variable is doneprot. This variable appears also in 1983, but that year’s question was so different in formulation that it cannot be placed in the same series (Jowell and Airey 1984: 169).

\textsuperscript{13} The question on anti-government demonstrations was asked of only half the sample.
commingles life cycle and cohort effects. Logically, the probability of ever having done something can only increase over the life cycle. Substantively, the hypothesis of an upward trend in protest—which is said to have commenced well before the late 1980s—implies that more recent birth cohorts should have been more likely to protest. Indeed, we might suspect that people who were young in the late 1960s and 1970s were more likely to protest than earlier generations, which implies declining participation for those aged in over fifty at the time of the survey. Other characteristics are sex, ethnicity (due to small numbers, nonwhites must be lumped together), residence in Greater London, and employment in the private versus the public sector (the latter including nationalized industries).\textsuperscript{14}

Table 1 presents the results of logistic regression. The odds ratio (exponentiated coefficient) express the effect of a unit change in the independent variable on the odds of having participated. Model 1 predicts having gone on anti-government demonstrations. Participation falls markedly with age: the odds for a 20-year old having demonstrated is twelve times the odds for an 80-year old (tested jointly, the two terms are statistically significant, \( p < .001 \)). Education has a strong positive relationship, exactly as expected: people with degrees have more than quadruple the odds of having demonstrated than people with no qualifications (the reference category). Workers in the public sector are more likely to have demonstrated than those in private employment (\( p < .05 \)). (The reference category is just a residual, including those without employment.) Residents of the capital are more likely to have demonstrated. Finally, fewer respondents reported having demonstrated in 1986 than in 1989 (as we saw in Figure 4).\textsuperscript{15}

Model 2 predicts having participated in a strike.\textsuperscript{16} The results depart notably from Model 1. Men are far more likely to have gone on strike. Age has a non-monotonic effect, peaking around 50; this is the cohort born in the late 1930s. Participation now falls with education. People with no qualifications or the Certificate of Secondary Education (a qualification for less academic pupils, instituted in 1965) have double the odds of going on strike than people with degrees. Residence in the capital makes no difference. The only resemblance with Model 1 is the higher participation in the public sector compared to the private (\( p < .001 \)).

Model 3 predicts having participated in protest of either form. The results blend the two prior models, in proportion to the prevalence of each form. It is no surprise that education has no significant effect on overall participation. This dependent variable—combining anti-

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\[\text{\textsuperscript{14 Variables are } hedqual, age, sex, rsector, and region.} \]

\[\text{\textsuperscript{15 The intervening years saw relatively low levels of protest (see Figure 6), and so this difference might be an artifact. In the 1989 interview, the question on protest followed a question on interest in politics, which could have primed the respondent to report more political action; in 1986, three more tedious questions intervened (Jowell, Witherspoon, and Brook 1987, p. 228; Jowell et al. 1990, p. 264).} \]

\[\text{\textsuperscript{16 Restricting the analysis to half the sample (as for anti-government demonstrations) makes no difference to the results.} \]
government demonstrations and all strikes—could be criticized as giving undue weight to strikes. (Just as comparing unofficial strikes with lawful demonstrations is biased in the other direction.) As noted above, the BSA formulation understates the importance of demonstrations: 7% of the BSA sample in 1986 and 1989 responded positively, whereas interpolation from WVS suggests a figure of 12% for lawful demonstrations. To avoid this criticism, we can reweight the BSA sample by giving greater weight to individuals who had taken part in anti-government demonstrations, so that their proportion reaches the estimated 12%. \( ^{17} \) Participation in either form of protest is 28% (rather than 24%) of the reweighted sample. Model 4 shows that this makes little difference. Education’s contrary effects on strikes and demonstrations still cancel each other out.

The second stage is to incorporate subjective attitudes. We should acknowledge that these may be the consequence of participation in protest; causal direction cannot be precisely disentangled without a longitudinal survey (Finkel and Muller 1998; Opp and Kittel 2010). Ronald Inglehart’s Materialism-Postmaterialism scale measures whether someone prioritizes economic and physical security or self-expression and quality of life (Inglehart 1997; Inglehart and Welzel 2005). The concept has provoked a huge critical literature (e.g. Clarke et al. 1999; Davis and Davenport 1999; Majima and Savage 2007), which cannot detain us here. What matters is that this scale is positively associated with protest as measured by PAS and WVS. The exact questions used to construct the scale were not asked by the BSA, and so we can only assemble an approximation. We focus on four questions (detailed in the Appendix). Postmaterialism is proxied by the belief that the most important factor in one’s first job is interesting work rather than pay or job security; that criminals do not deserve stiffer sentences; that censorship is not necessary to uphold moral standards; and that the government should spend less on defence. Responses are condensed into a single scale using the principal component method, which yields a scale with mean of zero standard deviation of one. \( ^{18} \) Besides Postmaterialism, we control for identification with the Labour Party, ranging from -3 to 3. \( ^{19} \)

Table 2 shows the results of incorporating subjective attitudes. (Analysis has to be confined to 1986.) Model 5 predicts having participated in anti-government demonstrations. As expected from the literature, the Postmaterialism scale has a strong positive effect, even controlling for multiple other characteristics. Moving from the 10th to the 90th percentile on the scale would quadruple the odds of having participated. This magnitude is the same as moving from strongly against to strongly in favour of Labour (from 10th to 90th percentile). The effect of education remains positive (though attenuated in strength), showing that its

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17 The new weights are constructed by multiplying wfactor by 1.72 if the respondent had taken part in anti-government demonstration, and by .94 otherwise.

18 Only half the 1986 sample were asked all the questions from which the scale is derived.

19 Variable is labfeel.
effect is not entirely mediated by Postmaterialism. Model 6 predicts having gone on strike. Postmaterialism has the opposite effect on striking. Moving from the 10th to the 90th percentile would reduce by over a third the odds of having gone on strike. Model 7 predicts having participated in either type of protest. Postmaterialism has no discernible effect. This result does not change with the reweighted Model 8. Reweighting does produce one statistically significant effect for education. People whose highest qualification was A-level (or equivalent) were more likely to protest compared to those without qualifications, controlling for Postmaterialism and identification with Labour. Nevertheless, the difference between having no qualification and having a degree is slight (and not statistically significant).

In sum, then, the BSA reveals important differences between strikers and demonstrators. Demonstrators match the portrait of protesters in the literature: highly educated people with Postmaterialist values. Strikers, by contrast, have lower education and adhere to Materialist values, though the magnitude of these effects are smaller than for demonstrators. If we examine the characteristics of people who have participated in either sort of protest, the result will depend on the relative preponderance of strikers and of demonstrators. In Britain in the late 1980s, about twice as many people had joined a strike as had gone on a lawful demonstration, and so the characteristics of strikers predominate. The results for Postmaterialism are suggestive rather than definitive, as the scale is only a proxy. For education, however, there is no ambiguity. The ‘iron law’ linking higher education and protest is sundered—or at least can only be preserved if one redefines protest to exclude strikes.


Sample surveys like BSA and WVS estimate the proportion of the population who have ever taken part in various types of protest. The questions condense a lifetime’s experience into a single response. An affirmative answer may indicate that the respondent protested yesterday or decades ago. It may indicate that the respondent protested once or a hundred times. Thus the proportion of affirmative answers at any point in time does not really measure ‘protest activity’ (Dalton 2006: 67). To truly measure protest activity, we need data on events. England was the site for pioneering endeavours to systematically catalogue events by historical sociologists (e.g. Hobsbawm and Rudé 1969; Tilly and Schweitzer 1982; Tilly 1995). Rootes (2003) has compiled data on environmental protests from 1988 to 1997, but there is nothing comparable to the data collected in European countries like Germany (1950-1997) and in the United States (1960-1990).20

The sole comprehensive source is European Protest and Coercion Data, spanning the period 1980-1995, created by Ronald Francisco at the University of Kansas (Francisco 2009,

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20 The US data unfortunately omit strikes (Soule and Earl 2005).
Events were coded from news feeds accessed from Nexis. For Britain, the most common sources were Reuters, Glasgow Herald, Guardian, Press Association, Independent, and Daily Telegraph. Only minimal information is provided on each event, which might explain why the dataset is unduly neglected by social scientists. For our purpose, it has two great virtues. One is the inclusion of strikes. The other is the systematic recording of the number of participants in each event, which is necessarily approximate: ‘hundreds’ was coded as 301, ‘thousands’ as 3001, and so on. Ongoing events are entered for every day; to clarify this point, I will refer to the unit of observation as the daily event. My analysis is confined to Britain, excluding Northern Ireland. There are over 27,000 daily events, divided into about ninety types, from press conferences to bombings.

An overarching category of strikes can be created by combining strikes, a single general strike, and lockouts. This can be calibrated against labour disputes as counted by official statistics, measured by the total number of working days lost, shown in Figure 5. The correlation with the number of workers directly involved (Figure 2) is only modest (r = .59). The 1970s and 1980s loom larger, eclipsing the 1960s, because strikes lasted longer. The decline after the 1980s is still more pronounced. Compared to this official series, two major anomalies appear in the Kansas data. Both are due to ‘days of action’—brief general strikes—staged by the Trades Union Congress (TUC): one supporting a pay rise for healthcare workers in 1982, another protesting against the exclusion of unions at the Government Communications Headquarters in 1984. The Kansas data count over a million strikers in each event. These numbers are implausibly large and so I substitute figures derived from official statistics. Aside from these corrections, I make one further downward adjustment. Official figures on days lost naturally cover the normal working week, whereas Kansas data usually include Saturday. I therefore discard strike days on weekends (keeping only a strike’s first day if it began on a weekend). Thus altered, Kansas data record a total of 66 million strike days, compared to 70 million days from official statistics. There are two offsetting discrepancies between these series. Some strikes will not be sufficiently newsworthy to warrant reporting by the media, and so will be missed by the Kansas data. Conversely, official statistics exclude strikes over issues beyond terms and conditions of employment, such as the TUC’s day of action against the government’s economic policies in 1980. Figure 5 also shows

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21 Official statistics include days lost by workers who were only indirectly involved—prevented from working because other workers in the same establishment had gone out of strike. To exclude such days, I reduce the official series of working days lost by each year’s ratio of workers indirectly involved to total workers involved (by 13% overall).

22 My judgment comes from reports in newspapers (Guardian, Financial Times, Times) and newswires (Associated Press, Reuters).

23 Saturdays constitute 13% of strike days, and Sundays 2%.
the Kansas data, with an extraordinarily high annual correlation of .99. The monthly correlation is .94.24

Having used official statistics to vindicate the Kansas data on strikes (with a few downward adjustments), we can now compare participation in strikes with other types of events. Table 3 summarizes all events in Kansas data. Strikes account for 67% of the total number of participants in each daily event, or participant-days for short. The total aggregates very disparate events, including repression—such as arrests—as well as protest. To create a category that approximates the demonstration specified in survey questions, we can combine demonstration with march, rally, and vigil. Together these accounted for 4.2 million participant-days. An additional category can be created for more confrontational events: occupation, obstruction, civil disobedience, riot (including prison riots), break in, and disruption. These accounted for a further 1.6 million participant-days. Of the remainder, the largest category by far comprises slowdowns by workers. As with strikes, this figure is pruned by omitting weekends. The Kansas data record boycotts and petitions each contributing over a million participant-days, though these numbers are hardly meaningful because the actions are far less newsworthy. The ‘symbolic’ category is dominated by a single event: households momentarily switching off their lights in solidarity with coal miners.25

In sum, demonstrations account for tiny fraction of the volume of protest, while strikes represent the great bulk. Figure 6 compares strikes, demonstrations, and occupations over the period. Clearly the decline of strikes dominates the series. Considering the target of strikes, the employer was the state (including nationalized industries) in 89% of participant-days.

These figures count ongoing events separately each day. It might be objected, perhaps, that counting days is weighted in favour of strikes. Theoretically, I would argue that going on strike for a week—and thus losing a week’s wages—represents a greater degree of protest than attending a demonstration for an afternoon. Nevertheless, we can transform the data by treating ongoing events as a single event, and counting the maximum number of participants in any one day.26 The longest ongoing event, lasting over eight years, was the occupation outside Faslane Naval Base to oppose Trident nuclear missiles. As Table 3 shows, the number of strikers is just under 12 million (official statistics, as in Figure 2, count 10.3 million).

24 Monthly data (Office of National Statistics 2012b) are available only for the United Kingdom as a whole, but Northern Ireland contributed only 0.9% of days lost in this period.

25 Kansas data record two million participants in this event, but the source referred to a dip in electricity equivalent to this number of lightbulbs, suggesting at most hundreds of thousands of people (Times, 19 October 1992).

26 Ongoing events are identified as having the same characteristics (type of action, protesters, target, issue, description of event, location, and country) on successive days. Successive days may skip weekends.
Demonstrators number 4 million, and occupiers fewer than half a million. Although demonstrations feature more prominently when we count participants rather than participant-days, they are still vastly outnumbered by strikes.

**Conclusion**

The mismeasurement of strikes has distorted our understanding of protest. Surveys of political participation, by omitting a general question about participation in strikes, have failed to capture an important type of protest action. The question on ‘unofficial strikes’ is an inadequate substitute. The importance of the omission will, of course, vary across countries and over time. In Britain, there has been a severe decline in striking. The number of strikers per adult population fell by 75% from the 1970s to the 2000s (Figure 2), while the number of working days lost per adult fell by 95% (Figure 5). This tremendous decline will have overwhelmed the modest increase in participation in demonstrations (Figure 1). There is no justification, therefore, to assert that there has been an overall increase in protest in Britain. Whether the same finding holds for countries remains to be seen. Given the similar trajectory in strikes in the United States and other English-speaking countries, the finding is unlikely to be peculiar to Britain. As well distorting the trend over time, the mismeasurement of strikes also distorts the portrait of the typical protester. At least for Britain in the period before the late 1980s, strikers were distinctly less educated and more Materialist in their values, compared to people who took part in anti-government demonstrations. When both types of protest are combined, there was no positive association with education or with Postmaterialism. The force of this finding will, of course, vary with the importance of strikes. Today, the conventional portrait of the protester as a highly educated Postmaterialist is correct—but this is a snapshot of the contemporary conjuncture, and not a robust generalization about protest in Western democracies over the past decades.

One response to my argument is to claim that strikes do not belong to the domain of political participation, that they are not ‘elite-challenging behavior’ or ‘collective action’. If it is wished to exclude strikes on theoretical grounds, then that exclusion should be made explicit. After all, when social scientists began to systematically measure protest in the 1970s, they did include at least some types of strikes (as well references cited above, see also Hibbs 1973: 8). The political significance of strikes deserves reiteration. Firstly, strikes implicate one crucial nexus relationship of power in modern societies—between employers and workers—and challenge the hegemony of market exchange. Secondly, many strikes involve state employees, which involve the government directly as employer. Thirdly, some strikes inconvenience the public as consumers or disrupt the economy, which can provoke the

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27 This method underestimates participation in longstanding occupations, of course, because it does not account for circulation of people staying for a brief time. As with strikes, participant-days is a better measure.
government to intervene. Fourthly, some strikes lead to physical confrontation between picketers and strike-breakers—bringing in the police, and thereby the state, as guarantor of public order. All four points are exemplified by the miners’ strike in 1984, which ‘challenged the very core of Thatcherism’s strategy towards the nationalized industries in particular and the trade union movement in general’ (Richards 1996: 1). The climactic clash between picketers and police at Orgreave colliery involved at least ten thousand combatants. Over the course of the strike, eleven hundred workers were arrested. The Prime Minister famously denounced the strikers as ‘the enemy within’—‘more difficult to fight, and more dangerous to liberty’ than the foreign state with which the United Kingdom had just been at war. Defining a category of political participation which excluded the miners’ strike would seem hard to defend. This strike was exceptional, of course. Most strikes are routine: workers strike for a modest wage increase, abiding by employment law and contractual terms; the dispute is quickly resolved by negotiations between employer and trade union. Most demonstrations are equally routine: a gathering of people march from one place to another, following a route agreed with the police; they chant slogans, pose for the media, and go home.

The mismeasurement of strikes has important implications for our understanding of contemporary democracies. The survey literature already alerts us to the overrepresentation of the middle class—to put it broadly, those with university education—among protesters, as among voters (e.g. Dalton 2006: 71). This warning gains greater force once strikes are adequately measured, and we realize that this overrepresentation is a recent development. In the 1980s, people with a university degree were far more likely to demonstrate, but less likely to strike. Given the prevalence of strikes, these differences cancel out when considering protest of either type. With the dramatic fall in strikes over the last two decades, protest has become almost the exclusive preserve of the middle class. This shift has coincided with increasing economic inequality in Anglophone societies. Uncovering the causal relationships between these two trends is an urgent question for further research (e.g. Western and Rosenfeld 2011).

The mismeasurement of strikes is an interesting case in the sociology of knowledge. There was no conspiracy by bourgeois academics to minimize class struggle. Rather, social scientists in the early 1970s innovated measurement tools for a particular theoretical purpose and in a particular historical context. Given the importance occupied by unofficial strikes in British political life, and given the goal of measuring ‘protest potential’, it was entirely reasonable to exclusively focus on this specific type of strike. But labour-capital conflict was rapidly transformed. In the same year that Marsh conducted his survey, a scholar of industrial relations observed that ‘the niggly unofficial strikes which seemed to be bringing Britain to the verge of economic destruction only five years ago are lessening in significance because of the massive and lengthy confrontations’—official strikes—‘that have become part of the industrial scene’ (Silver 1973: 98). Once PAS had asked the same battery of questions across
several countries, the methodological imperative was to replicate the same questions in subsequent surveys—despite the transformation of the social phenomenon to be measured. Thus WVS adopted the same questions (albeit over a different time horizon, a difference which has been ignored), in effect fossilizing the peculiarities of Britain in the early 1970s. There is a direct parallel with one question used to construct the Materialism-Postmaterialism scale, asking about inflation. Formulated in a period of rampant inflation, the question became irrelevant as inflation fell (Clarke et al. 1999). As a standard battery of questions is deployed in multiple surveys, they come to define the phenomenon. Rather than conceptualizing the phenomenon and interrogating the data that can be brought to bear upon it, social scientists simply download survey data and analyse them. The conclusion is not, of course, to avoid systematic data collection. The point is to be aware of the ways in which our measurement tools can inadvertently distort our understanding of social phenomena.
Appendix: Postmaterialism scale

1. ‘Suppose you were advising a young person who was looking for his or her first job. Which one of these would you say is the most important, and which next?’ Variables `frstjob1` and `frstjob2`. Coded -1 if highest priority given either to good starting pay or to a secure job for the future (55%); 1 if highest priority given to interesting work (31%); otherwise, -.5 if second priority given to pay or security (7%), or .5 if to interesting work (5%); otherwise, 0 (3%).

2. ‘Censorship of films and magazines is necessary to uphold moral standards.’ Variable `censor`. Coded -1 if agree strongly (21%); -.5 if agree (47%); .5 if disagree (12%); 1 if disagree strongly (3%); otherwise, 0 (16%).

3. ‘People who break the law should be given stiffer sentences.’ Variable `stifsent`. Coded -1 if agree strongly (32%); -.5 if agree (43%); .5 if disagree (6%); 1 if disagree strongly (1%); otherwise, 0 (18%).

4. ‘whether or not the government should spend less on defence’: Variable `defence`. Coded -1 if definitely should not (13%); -.5 if probably should not (23%); .5 if probably should (34%); -1 if definitely should (28%); otherwise, 0 (2%).

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<td>First job</td>
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<td>Censorship</td>
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<tr>
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<td>.81</td>
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<tr>
<td>Defence</td>
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Bibliography


Barnes S.H. and Kaase, M. (eds), 1979, Political Action: Mass Participation in Five Western Democracies, Sage


Department of Employment Gazette, 1972

Department of Employment, 1976, British Labour Statistics Year Book


Francisco, R.A. 2009, Dynamics of Sociology, Springer


Marsh, A. 1977, Protest and Political Consciousness, Sage
Muller, E.N. 1979, Aggressive Political Participation, Princeton University Press
Norris, P. 2002, Democratic Phoenix: Reinventing Political Activism, Cambridge University Press
Parkin, F. 1968, Middle-Class Radicalism: The Social Basis of the British Campaign for Nuclear Disarmament, Manchester University Press


Richards, Andrew J. 1996, *Miners on Strike: Class Solidarity and Division in Britain*, Berg


Figure 1: Participation in various protest actions in Britain (WVS)

- Boycott
- Lawful demonstration
- Unofficial strike
- Occupation

Adults who have ever participated

Year:
- 1980
- 1985
- 1990
- 1995
- 2000
- 2005
Figure 2: Workers directly involved in labour disputes, 1946-2011
Figure 3: Workers involved in labour disputes, 1960-1980

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<th>Year</th>
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<th>Other</th>
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<td>1973</td>
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<td>1979</td>
<td>20%</td>
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</tr>
<tr>
<td>1980</td>
<td>21%</td>
<td>22%</td>
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</table>
Figure 4: Participation in various protest actions in Britain

- WVS: lawful demonstration
- BSA: anti-government demonstration

Adults who have ever participated

<table>
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<td>16%</td>
<td>18%</td>
<td>20%</td>
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Figure 5: Working days lost in labour disputes, 1946-2011

- Official statistics
- Kansas data (adjusted)

Days divided by adult population
Figure 6: Protest events in Britain, 1980-1995 (Kansas data)

- Strikes
- Demonstrations etc
- Occupations etc

Participant-days (millions)
Table 1: Determinants of participation in protest (BSA 1986 and 1989)

<table>
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<td>odds</td>
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odds: odds ratio; s.e.: linearized standard error; p: p-value (two-tailed). *** p < .001, ** p < .01, * p < .05
### Table 2: Determinants of participation in protests (BBA 1986)

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**Notes:**
- Odds: odds ratio; s.e.: linearized standard error; p: p-value (two-tailed)
- *** p < .001, ** p < .01, * p < .05
- Model 1: Male
- Model 2: Female
- Model 3: Anti-govt demo
- Model 4: Strike
- Model 5: Either (reweighted)
Table 3: Types of protest and repression events in Britain, 1980-1995 (Kansas data)

<table>
<thead>
<tr>
<th>Type</th>
<th>Participant days (millions)</th>
<th>Participants (millions)</th>
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<tbody>
<tr>
<td>Strike</td>
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<td>11.7</td>
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<tr>
<td>Demonstration etc</td>
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<td>Occupation etc</td>
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<td>Slowdown</td>
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<tr>
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<tr>
<td>Other</td>
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<tr>
<td>Total</td>
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* excluding weekends