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Magnifying Voters’ Preferences: Bias in Elections to Birmingham’s City Council

Historians, political scientists, and others interested in the interplay between voting in Parliamentary and local government elections in the United Kingdom are hampered by the lack of a time series of aggregate local electoral data. Historians, in particular, feel that existing analyses of voting behavior pay too little regard to the enduring influence of local contextual factors. Indeed, a characteristic feature of the study of electoral change among historians has been an overwhelming emphasis upon Parliamentary elections. Key features of the period—such as the decline of liberalism, the rise of the Labour party, the heyday of two-party politics after 1945, and the re-emergence of third-party politics after 1964—have all undergone analysis with reference to successive general elections. This focus has been understandable in light of the relatively easy accessibility of national statistics and the difficulty of finding accurate local electoral data. But historians have long recognized the importance of the “politics of place.” One recent survey concluded that “only long-range local studies” will reveal exactly how the process of electoral realignment took place.¹

Equipped with the necessary local data, historians would be in a much stronger position to probe the electoral dynamics of Britain throughout the whole of the twentieth century. This article should be read as one of the first of those necessary longitudinal local studies. The analysis takes advantage of newly available data on local elections. Eventually, the types of data reported herein will be expanded greatly, allowing historians first, to identify patterns of local electoral behavior and party competition and, second, to use that knowledge to confirm or challenge conventional thinking about the development of twentieth-century electoral behavior.

This article examines how partisan support and political control in one English city, Birmingham, evolved throughout the twentieth century. It focuses on how the distinctive patterns of party competition and the operation of the voting system combined to shape, then re-shape, party political control. In local elections, as in Parliamentary elections, the relationship between a party’s vote share and its subsequent reward in seats is often skewed: Large parties benefit with larger shares of seats than of votes, whereas smaller parties are frequently at a disadvantage because of both electoral disproportionality and electoral bias. Disproportionality occurs when the distribution of seats across the political parties on the elected body—the Birmingham City Council in this case—is not the same as the distribution of votes at the relevant election. Some parties are overrepresented; that is, they have a greater percentage of seats than votes at the expense of others. Bias occurs when disproportionality does not apply equally to all of the parties; for example, one party experiences greater overrepresentation than another with the same vote share. Understanding the dynamics of political control in Birmingham, therefore, requires considering the contribution to that control played by the operation of the electoral system itself.

Until recently, the sources of electoral bias have largely been overlooked. However, research into voting in twentieth-century—especially post–World War II—Parliamentary elections reveals that two factors contribute to the varying imbalance in the seats-to-votes ratio and the direction of electoral bias. Three types of vote can be identified within this process: wasted votes, those cast in a constituency where a party’s candidate loses, thus bringing no electoral returns; surplus votes, garnered where a party’s
winning candidate receives more votes than are strictly necessary to defeat the nearest challenger; and effective votes, those required to win in each constituency (the number of votes won by the second-placed candidate, plus one). Underlying the distribution of these three vote types is a set of conditions that have a direct bearing on electoral outcomes: how the electoral map is drawn; how evenly the electorate is divided among those constituencies; how many voters participate in each constituency; and how each party’s vote is distributed across the constituencies. Bias results from the interaction of two types of map—those showing the geographies of voting for the various parties contesting an election and those showing the constituencies within which votes are counted and winners determined.

In comparison with Parliamentary elections, little is known about the long-run processes of party competition and the operation of electoral bias within local government, largely because historical local electoral data have been unavailable. However, data are now available for some important cities, such as Birmingham, where recently published local election results dating from 1911 onward present new detail about electoral competition and the components of electoral bias over a relatively long period of time. That historical period embraces phases of electoral de-alignment and re-alignment, of a dominant and then disintegrating two-party system, as well as changing patterns of party competition. It also includes significant demographic changes; Birmingham grew in both area and population. Finally, from 1911 to 2000, periodic, sometimes piecemeal, reviews of electoral areas took place within the city’s boundaries, greatly influencing political control of the city. The reviews produced either new wards or revisions of existing wards that were first used in the elections held in 1927, 1934, 1950, 1962 and 1982.

An analysis of electoral disproportionality and bias that could embrace such profound changes in a city’s political evolution would provide a richer insight into the dynamics of the electoral system and the ways in which votes are translated into the Council seats that ultimately determine the allocation of political power.

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This article identifies the components of electoral bias in Birmingham, over a ninety year period, paying particular attention to how those different components fluctuated in importance. Thus, it does not simply shed new light on local electoral competition within this particular city, important as that aspect may be; it also sets a broader agenda for understanding the politics of place and the long-term evolution of the local party system.3

Birmingham became a county borough in 1889. The growth of its electorate, consequent upon annexations of surrounding districts and demographic change, provides clear evidence of the city’s rapid transformation and the failure of the electoral system to adjust to those changes. The city saw three crucial periods in its political development, each characterized by changing patterns of party competition and control. These changes permit an examination of the various components of electoral bias, assessing their relative impact upon the fortunes of the two major parties that have dominated Birmingham’s politics for virtually a century. This method of assessing the nature and direction of electoral bias can shed new light on how local political control is determined and, in turn, may better inform the analysis of electoral dynamics in twentieth-century Britain.4

**Political Change and the Growth of England’s Second City**

The disappearance of the Liberals in the first part of the twentieth century and their eventual replacement by Labour in Britain’s national two-party system has been the focus of many studies. Similarly, the re-emergence onto the national stage of the Liberals (in the form of Liberal Democrats) and the implications for two-party stability during the final quarter of the century provoked renewed academic interest. Ironically, however, the city that originally contributed more than most to the transformation of party organization and competition has been neglected so far as the processes of party-system change and development is concerned.5

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4 County boroughs were established by late nineteenth-century legislation to extract the country’s largest towns and cities from their surrounding counties and enable them to raise revenues and deliver services independently, within the constraints of national legislation.

The city of Birmingham holds a fascination for students of party politics and electoral behavior, in part for the so-called Birmingham caucus formed in the late nineteenth century, which marked the entry of party politics into local government. Skills learned in the caucus by such prominent Birmingham politicians as Joseph Chamberlain contributed to the formation of the National Liberation Federation. The spread of new methods of party organization and electoral campaigning helped it to secure victory in the general election of 1880. When Chamberlain left the party, he returned to Birmingham and established the National Radical Union. By 1900, he was the leader of the breakaway Liberal Unionists and a member of a Conservative-led cabinet. The party system was in a state of flux. The national Liberal landslide in 1906 saw a pre-election pact between Liberals and the fledgling Labour party, but in a few areas, including Birmingham, the Liberal Unionists remained in control.  

Chamberlain’s legacy was to ensure that Liberal Unionists and Conservatives worked closely together within Britain’s second city. The two parties finally merged in 1918, producing a combination that would dominate the city’s politics until the outbreak of World War II. In Birmingham, the Liberals were a spent force before they met with a similar fate nationally, leaving the way clear for the emergence of the Labour party. To some extent, Birmingham reflects changes in the national political mood, but Newton is wrong to conclude “that genuinely local variations are too small to be worth considering.” Rather, in the context of changing local partisanship and local party-system development during the twentieth century, Birmingham constitutes a significant case study in its own right.

Birmingham received its first Charter of Incorporation in

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By the time it reached City (and County Borough) status, it had established a reputation for strong and enlightened municipal government under the guidance of Chamberlain, three times Birmingham’s mayor during the 1870s before becoming its member of Parliament. By the first decade of the twentieth century, local pressures to expand the city’s administrative boundaries had emerged. A special Act of Parliament and, in 1911, the Greater Birmingham Act incorporated some smaller local authorities around the fringes of the new city. Birmingham was given a new charter, which established a council of ninety elected councillors representing thirty wards, each with three councillors. During the 1920s, Birmingham expanded further, adding parts of Perry Barr Urban District and then in 1931, parts of Castle Bromwich and Sheldon. Local government reorganization during the 1970s resulted in the addition of Sutton Coldfield (a substantial high-status suburban town), thus sealing Birmingham’s status as England’s second city.  

The electoral cycle was to consist of annual elections, one-third of the councillors retiring each time, as customary in all county boroughs since their establishment in the late nineteenth century. Conservative politicians, in particular, were concerned that a system of “at-large” elections would disadvantage the party. The division of the city into wards was the responsibility of the local authority, with no strict requirement of periodic reviews. Little regard was paid to the principle of “one vote, one value” in drawing up a map of electoral wards; “communities of shared local interest” were deemed of greater importance. Discrepancies in ward electorate size after the 1911 Act illustrate this point. In 1911, on average, fewer than 5,000 voters were on each ward electoral register, this still being the era of a limited electoral franchise. Northfield, the smallest ward, had just 1,523 electors, and All Saints, the largest, had 8,024 electors. The fact that each of these wards was represented by three councillors meant a large variation in elector-to-councillor ratios. Following World War I and franchise extension, Birmingham’s electorate more than doubled to 351,174. However, disparities between ward electorates remained, the biggest becoming more than five times larger than the smallest. Boundary changes during the 1920s reduced the range, but by the
decade’s close, a difference of almost 18,000 electors between the largest and smallest wards still existed. Each still had three councillors.  

In 1927, when the central part of Perry Barr Urban District extended Birmingham’s administrative boundaries, the new ward had a total electorate of just 738, more than six times smaller than the next largest ward. It was allocated only one councillor. By 1933, however, this area’s electorate had swollen to more than 13,000, overtaking a significant number of existing wards. The city authority then determined that the ward deserved the standard complement of three councillors. 

In 1934, the city revised its own ward boundaries, creating three new wards and abolishing others. This change, and the recent introduction of Perry Barr, saw the total rise to thirty-four electoral wards. Efforts to equalize ward electorate size were not consistent. The new wards of Bromford and Stetchford, for example, had between 11,000 and 12,000 electors, but the electorate of the third newly created ward, Hall Green, numbered 18,000. Community of local interest was still deemed to be of more importance than electoral equality. Elector-to-councillor ratios, small in 1911, skyrocketed because of the population growth of the 1930s. By 1938, the average number of electors per councillor was 5,000, although the range between the largest and smallest wards was now more than 20,000 electors. 

The main local authorities’ responsibility for electoral districting inevitably impacted Parliamentary constituency boundaries. Between 1918 and 1947 no alterations in the constituency boundaries built from local-authority wards took place. So long as local ward electorates diverged in size, so would Parliamentary constituencies. By 1939, for example, thirty Parliamentary constituencies nationally had more than 100,000 electors, whereas thirteen other seats contained fewer than 30,000 electors. However, not until the late 1960s were steps taken to establish some common ground between the review of Parliamentary constituency boundaries and the revision of local electoral wards. 

After World War II, Birmingham’s population growth continued. The 1945 register had 200,000 more electors than 1939’s. Perry Barr continued to have the largest electorate. By 1949, it had

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50,243 electors, making it larger than some Parliamentary constituencies of the period. Long overdue and extensive boundary changes were introduced in time for the 1950 elections, raising the number of wards to thirty-eight; the boundaries of only two wards remained unchanged. These extensive changes meant that electorate sizes became more concentrated about the mean. The boundary review succeeded in reducing the range between ward electorates to just 9,000 electors. However, no sooner had the new boundaries been introduced than ward electorates diverged once again because of population movements. By 1960, the range in ward electorate had more than doubled to more than 22,000. The subsequent boundary review, implemented prior to the elections in 1962, saw the number of three-member wards rise to forty.

Yet another boundary review was postponed when local government reorganization became imminent. The 1972 Local Government Act not only inaugurated a new structure for England and Wales but also took away from local authorities the responsibility for devising and implementing their own ward boundary changes. The new legislation instituted the Local Government Boundary Commission that would review, at intervals, the electoral arrangements for all the newly created authorities. The Commission was to take account “the need to secure effective and convenient local government” as well as “the wishes of the people.” Furthermore, it was to ensure, “as nearly as may be,” electoral equality between the wards in each local authority. These requirements were sometimes mutually exclusive.10

When the new Birmingham Metropolitan Borough was established in 1973, elections were conducted using the old county-borough wards because a review of ward boundaries could not be conducted in time. However, three new wards were created to reflect the absorption of Sutton Coldfield within the new authority, which brought the Council’s size to 129 members. Using existing ward boundaries meant that, in effect, All Saints ward’s 7,016 electors enjoyed four times the voting power of Weoley’s residents (ward electorate, 29,198). Disparities in electorates continued to grow, until, in 1980, the biggest ward was six times larger than the smallest. This factor was likely to work in Labour’s favor, given that most of the party’s safest seats were in the inner-

10 Rallings, Thrasher, and James Downe, One Vote, One Value: Electoral Re-districting in English Local Government (Aldershot, 2002).
city areas where population was declining; most Conservative seats were located in the suburbs where population, even when not increasing, was relatively large. Not until 1982 did the Local Government Boundary Commission’s proposals for re-drawing the city’s wards come to fruition. But electoral inequalities emerged again. By 2000, with another boundary review still uncompleted, electors in the smallest ward were, in effect, receiving twice the voting power of electors located in the city’s largest wards.\footnote{The Metropolitan boroughs were units within newly defined metropolitan counties (the West Midlands conurbation in Birmingham’s case), allowing a division of responsibilities for various local services and revenue-raising powers. Birmingham (which retained its status as a city) lost its independence for the period in which the metropolitan counties existed (they were abolished in 1986). Wesely’s electorate in 1973 was actually larger than the entire electorate for the country’s smallest local authority, Rutland District Council, which had 19,161 persons on its electoral register. During the 1930s, the Conservative-led governments declined to conduct a review of Parliamentary constituency boundaries, despite extensive evidence of substantial disparities in electorates. If enacted, these boundaries would certainly have benefited the Labour party. See Johnston et al., “The Conservative Century? Geography and Conservative electoral success during the twentieth century,” in David Gilbert, David Matless, and Brian Short (eds.), Geographies of British Modernity: Space and Society in the Twentieth Century (Oxford, 2003), 54–79.}

The intense growth of Birmingham’s area and population for ninety years guaranteed that electorate sizes would diverge. Adherence to the principle of “one vote, one value,” together with regular ward-boundary reviews, might have countered that process, but other forces were at work. The local assumption seems to have been that representing communities within the city was more important than equalizing electorates. Maintaining symmetry within the electoral cycle, whereby each ward held an election each year, meant that wards, regardless of size, had to be represented by three councillors. The emerging population differences exaggerated the relative strengths of each elector’s vote, which contributed toward overall electoral bias.\footnote{After 1974, the three-yearly elections were set within a four-yearly cycle. Birmingham City held elections in each of the first three years of the cycle, contesting one position per ward. In the fourth year, whole-council elections were held for the West Midlands county council. After the county council was abolished, the cycle of elections for the borough council was retained. One-third of the Council was re-elected for a four-year term in each of the first three years of the cycle, with no elections in the fourth.}

CHANGING PATTERNS OF ELECTORAL CONTESTATION, TURNOUT, AND PARTY COMPETITION

Competition for seats on the city council has generally been heated, with few uncontested. The biggest ex-
ceptions occurred in 1912 and 1913, when half or more of the seats were unopposed; in 1914, parties agreed not to contest the election. During the 1920s, uncontested seats accounted for about one-quarter of the total vacancies; in the 1930s, the proportion fell to approximately one-fifth. Since World War II, however, with the sole exception of the Edgbaston ward in 1945, every seat at each election has been contested. Conservatives were returned unopposed in no fewer than 163 of 212 uncontested seats during the period—77 percent of the total. Labour, with just twenty-one unopposed seats (10 percent), and the Liberals, with eighteen seats (9 percent), have had to work more for Council representation. The appearance of electoral bias reflects the Conservative party’s easy accumulation of seats during the prewar era.

One potential source of electoral disproportionality and bias, as noted above, is the discrepancy in ward electorates. A party that is relatively strong in wards with small electorates receives a better return for its votes (fewer votes per council seat) than a party with strength concentrated in larger wards. Another potential influence on the ratio between seats and votes is turnout. If one party wins a majority of its seats in wards with a low turnout, and its competitor tends to win in areas with a high turnout, the inequity will be reflected in the overall seats-to-votes ratios: It takes fewer votes to win seats in low-turnout wards (assuming equality of electorates). Between 1911 and 1939, average turnout in wards won by Labour candidates was higher than in those won by Conservatives in sixteen out of twenty-one elections, although the difference over the whole period was only two percentage points. This prewar picture is in sharp contrast to the prevailing situation since World War II, which shows a clear relationship between social class and the level of electoral participation. Areas dominated by working-class electors largely had lower turnouts than middle-class dominated neighborhoods. In all but three out of the forty-seven elections since 1945, the average turnout in Conservative-won wards has been higher than that in Labour wards. Sometimes the differences have been relatively small—on the order of a few percentage points—but on other occasions, the gap has reached double figures.13

13 The 1931 election is excluded from this calculation because Labour failed to win a single seat. In 1931, Ramsay MacDonald’s Labour government collapsed, and the party split.
Party competition and electoral success in Birmingham divide into different phases. The first phase, running from 1911 to the outbreak of World War II, saw Labour emerge as the principal competitor to the dominant Conservatives. The second phase of mainly two-party competition began in 1945, marking a period when an escalating Labour challenge led to fiercely contested elections and frequent changes in political control. The third phase, which began in early 1980s, brought uninterrupted Labour rule but with a growing third-party presence, initially in the guise of an electoral pact between Liberals and the Social Democratic Party and later the Liberal Democrats. Of particular interest are the changing distributions among the parties of votes and seats during this ninety-year period (see figures 1 and 2).

After 1911, the Conservative and Liberal Unionist parties operated an electoral pact, each concerned with the threat posed by the rising Labour party. Although Labour won the largest vote share in the first elections after World War I (Figure 1), the following six years saw a growth in Conservative party support, and its larger share of the popular vote produced a more equitable distribution of seats. The gradual drift toward a dominant Conservative and Labour two-party system continued throughout the second half of the 1920s. By the decade’s end, Liberal councillors had all but disappeared from the Council Chamber (Figure 2). From 1930 onward, the two main parties captured more than 90 percent of the votes cast; by 1936, electors could choose only between Conservative and Labour candidates. This two-party system favored the Conservative party, which prospered from landslide victories in both 1930 and 1931 and won an absolute majority of the votes cast in all but one election year prior to the outbreak of war.

Given the suspension of local and Parliamentary elections

MacDonald led a minority of his colleagues into a Conservative-dominated-coalition “National Government,” for which he was the first prime minister. The split resulted in Labour’s poor performance in local-government elections nationally. The 1968 election is also excluded from this calculation because Labour failed to win a single seat; the national Labour government headed by Harold Wilson was extremely unpopular. See William Hampton, Democracy and Community: A Study of Politics in Sheffield (Oxford, 1970).


Davies and Morley, County Boroughs; Phillips (ed.), Birmingham Votes.
during the war, the next test of party popularity arrived in 1945. At the general election in June, Labour took ten of Birmingham’s thirteen Parliamentary seats, capturing 53 percent of the citywide vote and benefiting from a 23 percent swing from the Conservatives. That momentum carried into the local elections of November 1945, in which Labour won almost 56 percent of the votes and took an eighteen-point lead over the Conservatives. Toward the end of the 1950s, however, the Liberals began to enjoy limited success in Parliamentary by-elections; Birmingham Liberals contested sixteen wards at the 1955 local elections. By 1958, doubtless prompted by their victory at the Torrington Parliamentary by-election, the Liberals captured 7 percent of the citywide vote in the council elections. Similarly, in 1962, just weeks after the Liberals’ much-celebrated Orpington Parliamentary by-election victory, the Birmingham Liberal party’s vote rose to 16 percent of the total in that year’s Council elections (Figure 1), resulting in its first council seat since the 1930s (Figure 2). Encouraged, Liberal candi-
dates began to contest more seats, but breaking the traditional two-party stranglehold proved difficult. Following local government reorganization in 1973, all 126 Council seats were contested at the inaugural election. Given Conservative difficulties nationally, Labour won a comfortable majority although the Liberals were able, albeit briefly, to establish a small third-party presence, winning 13 percent of the vote and nine seats. Nevertheless, even as late as 1980, Labour and Conservative parties together captured almost 90 percent of the vote.16

The third phase of party-system development was largely due to the creation of the Social Democrat Party (SDP), formed by a breakaway group of politicians from the Labour party. Liberal and SDP candidates made an electoral pact ensuring that no ward in-

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16 Robert B. McCallum and Alison Readman, *The British General Election of 1945* (London, 1945). Edward Heath’s government was unpopular because of inflation, wage constraints, and bitter conflicts with the miners and other trade unions.
A contest between candidates from the two parties, which together won one out of every four votes cast. The Labour and Conservative shares each fell below 40 percent for the first time since 1922 (Figure 1). Despite their electoral support, however, Liberal–sdp candidates won just four seats to the Conservatives’ sixty, clearly indicating an inefficient vote distribution; the seats-to-votes ratio was 1.4 for the Conservatives and just 0.1 for the Liberals. Nevertheless, an enduring pattern of three- and not two-party competition had begun.17

During the early 1990s, the Conservative party declined in local government throughout England. As Figure 1 shows, it polled less than 30 percent of Birmingham’s vote in 1994—a record low, as was its share of seats (Figure 2). The consequence of successive Labour landslides (across the full electoral cycle) meant that by 1996, Labour enjoyed a council majority of almost fifty. The Conservatives were left with thirteen seats, overtaken by the Liberal Democrats who, with seventeen seats, comprised the official opposition. Three-party competition had become the norm in Birmingham. The once-dominant Conservative party now found itself competing for second place.18

Profound changes in the size and distribution of Birmingham’s electorate, shifting patterns of contestation and turnout, and support for the parties across the city’s wards, together with a dynamic party system, have all impacted the level of electoral bias and thus the size of party majorities in the Council Chamber. For this purpose, we examine only single-vacancy seats contested by both Conservative and Labour candidates. This strategy does not materially affect this study’s substantive findings since it covers the vast majority of wards at every election after 1919. Since 1930, the two main parties have contested virtually every seat.19

ELECTORAL BIAS IN BIRMINGHAM

Given this political history, to what extent have election results in Birmingham been both dis-

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17 The seats-to-votes ratio is the percentage of contested seats won by a party, divided by the percentage of the votes cast for them.


19 Some U.S. studies of electoral bias and disproportionality have incorporated uncontested seats by estimating what the result would have been in light of their socioeconomic composition. In the absence of relevant data, we have not done that herein.
proportional and biased? Has one party enjoyed an advantage over the other in the translation of votes into seats? If so, has the winner always been the same party? Analysis of the elections held since the early part of the twentieth century, using only those wards in each year which were contested by both the Conservative and Labour parties for a single Council seat, can provide answers.\textsuperscript{20}

Figure 3, which shows the seats-to-votes ratio for each of the two main parties for the full set of elections, clearly indicates disproportionality in the election outcomes in those wards where a single vacancy was contested by both Conservative and Labour candidates. The ratios vary widely over time for each party. Rarely are they close to 1.0 when each party would have approximately the same percentage of the seats allocated as of the votes won. Rarely do they exceed 1.5 (the relevant party having 50 percentage points more seats than votes), but in several years, one of the parties—in all but a few cases, Labour—had a ratio below 0.5 (its allocation of seats being less than half of its percentage of the votes). Until 1945, the Conservatives usually had a ratio greater than 1.0, whereas Labour’s was substantially below that. Thenceforward, save a few years in the 1960s and 1980s, the Conservative ratio was generally less than 1.0, whereas Labour’s exceeded that figure (from the mid-1970s onward, when the Liberal vote share began to increase but without a commensurate gain in seats, both of the two main parties were able to have a seats-to-votes ratio in excess of 1.0). The outcome of almost every election was disproportional; the party getting the most votes had a “winner’s bonus” in the allocation of seats—particularly noticeable in 1931 and 1968 when the Conservative party enjoyed landslide victories, winning all of the seats contested with 68 and 61 percent of the votes cast, respectively.\textsuperscript{21}

Did the Conservative and Labour parties benefit equally from this “winner’s bonus,” creating a larger majority in the Council chamber than the difference in the votes won apparently justified? Figure 3 is inconclusive; the data must be reanalyzed. If no disproportionality took place in the allocation of seats relative to

\textsuperscript{20} In a small number of wards, more than one seat was available, usually to fill an unexpected vacancy because of a councillor’s death or retirement. Such wards are also excluded from our analyses.

\textsuperscript{21} Labour obtained 31\% of the votes in 1931 and 26\% in 1968, in each case failing to win a single ward.
votes, the ratios would always be 1.0; in the absence of bias, each party would achieve the same seats-to-votes ratio with the same share of the votes cast. Figure 4 shows that the larger is a party’s share of the two-party votes (the votes won by the two parties combined) across the contested wards, the larger is the ratio. When a party received less than half of the votes, it tended to get a ratio below 1.0 (a smaller percentage of seats than votes); when it received more than half of the votes, a ratio greater than 1.0 was the norm. The allocation of seats almost invariably disproportionally favored the winner, but significant differences between the two parties are evident.

The first difference manifests in the two trend lines in Figure 4, which indicate the moving average seats-to-votes ratio for each party. The trend upward means that both parties’ winner’s bonus increased with number of votes. But the trend line for Labour is higher than that for the Conservatives. At any vote percentage above 40, the Labour party obtained a higher
seats-to-votes ratio than did the Conservative party, the difference averaging 0.2 for much of the trend (thus, at 55 percent of the votes, for example, Labour had an average seats-to-votes ratio of 1.3—30 percent more votes than seats—whereas the Conservative average was just 1.1, an advantage of only 10 percentage points). Moreover, a number of elections in the bottom-right quadrant of the diagram show that even if a party received more than 50 percent of the votes, it had a seats-to-votes ratio of less than 1.0. In all but one of those elections, the Conservative party suffered the absence of a winner’s bonus. It not only took a smaller percentage of the seats than of the votes; it also took a minority of the seats despite getting a majority of the votes.

The implication of these ratio trends is that, in general, Labour has benefited from disproportionality more than the Conservatives have. Regardless of the percentage of votes cast, Labour had a better allocation of seats, suggesting that the system is biased
toward Labour. Furthermore, graphing the two sets of seats-to-votes ratios against time rather than party vote share (Figure 5) shows that this difference is a relatively recent phenomenon. Before 1950, the average Conservative ratio was higher than Labour’s. Afterward, however, Labour’s average ratio increased yearly, especially after 1980, whereas that for the Conservatives fell, precipitately after 1980.

Measuring Bias  Bias in election results can result from differences between the parties in their number of votes that are surplus, wasted, and effective. Bias means that one party has a larger effective vote percentage than the other. If an electoral system is unbiased, then no party should enjoy an advantage at any given vote share. Thus, the two parties that receive 50 percent of the votes cast across all of the contested wards should obtain 50 percent of the seats. But if one party gets more seats than the other when they have equal vote shares, the system is biased.

The calculation of bias in this study is based on a simple procedure first employed in the 1960s. We apply a uniform shift of votes across the various wards to achieve vote equality overall. For example, say that the Conservatives won 54 percent of the vote and Labour 46 percent across all of the wards in an election. To achieve equality, 4 percent of the vote must be reallocated to Labour by decreasing the Conservative share of votes by 4 percentage points and increasing Labour’s share by four percentage points in each ward, ultimately to determine which party would have won it. In an unbiased system, an equal share of the votes for each party should result in the same number of seats. To evaluate the extent of any bias, if Labour takes more seats with an equal vote share, the difference in the number of seats is shown as a positive number; if the Conservatives take more seats, it is shown as a negative number.\(^{22}\)

\(^{22}\) This method for calculating electoral bias was introduced by Ralph H. Brookes, “Electoral Distortion in New Zealand,” *Australian Journal of Politics and History*, V (1959), 218–223; *idem*, “The Analysis of Distorted Representation in Two-Party, Single-Member Elections,” *Political Science*, XII (1960) 158–167. Brookes’ method was further developed by Johnston, Rossiter, and Pattie, “Integrating and Decomposing the Sources of Partisan Bias: Brookes’ Method and the Impact of Redistricting in Great Britain,” *Electoral Studies*, XVIII (1999), 367–378; Johnston et al., *From Votes to Seats*. Bias can be calculated for any vote share; values for different distributions lend further insight into its generation (as in Johnston et al., “Labour Electoral Landslides”). The current analyses concentrate on equal shares only, which are the easiest to interpret in terms of generalized concepts of electoral fairness.
Our expectation from the pattern of ratios in Figure 4 was that the system was biased, and increasingly in Labour's favor. Figure 6 confirms it, but only since World War II. Before that point a small bias favored the Conservatives—never more than eight seats, although given the number of wards involved (twenty-seven or less during that period), a bias of eight seats was hardly negligible. From 1945 until 2000, the bias never favored the Conservatives, though two occasions showed no bias. The pro-Labour bias over that long period reached ten on four occasions (the largest number of contested wards was forty-two, in 1975 and 1976).

What caused the shift after World War II, and why was it so variable from 1945 to 2000? A major generator of bias is what Americans term malapportionment: a party with a large electorate in the smaller wards has an advantage over another that is stronger in the larger wards, because fewer votes are needed for victory. Figure 7 shows the average electorates in wards that would have been won by the Conservative and Labour parties with equal vote.
shares; the trends appear to parallel those of the overall bias figures in Figure 6. Until the mid-1930s, Labour-won wards were larger than those with Conservative victories: As the city’s population grew, Labour-held wards seemed to expand more than their opponents’. After the mid-1930s, however, the reverse was the case; Labour had the advantage of smaller-ward electorates in virtually every election, especially in the 1970s.

As noted earlier, population redistribution and decline in post–World War II Birmingham has largely involved a shift from the inner-city areas—mainly dominated by a Labour-voting working class—to the pro-Conservative suburbs. As this migration occurred, disparities in ward electorates grew, occasionally to be reduced by redrawing of the ward boundaries. These shifts are graphically illustrated in Figure 8, which shows not only the maximum and minimum ward electorate at each election but also the mean (which changed little after 1950 at just under 20,000 voters).
and the standard deviation around that mean. Every year after the introduction of a new set of wards, the standard deviation (the average squared deviation from the mean electorate) increased. Figure 9 clarifies this development by dividing the sequence into the five periods previously identified after each redistricting. The longer the period, the greater was the variation in ward electorates, though only after 1930 within the first period. The immediate post–1945 period saw the greatest exaggeration, consequent on the wartime decline of the inner-city population, but the trend was almost as steep in each of the next two periods. Only after 1983, when the city population and its distribution had stabilized, did the trend in the standard deviation become much shallower, though still significant.

One of the benefits of the bias measure used in this study is its capacity to be broken down into various components to allow an estimate of the bias in each election that derives from malapportionment alone. Figure 10 indicates a pro-Conservative situation...
in the 1920s and, with a few exceptions, a pro-Labour malapportionment bias thereafter, which peaked at seven seats in 1980. The implication is that malapportionment bias increased as each set of wards became older. Figure 11 confirms that after every redistricting, as the wards became older, pro-Labour malapportionment bias increased (hence the peaks in the graph), especially during the eighteen years that the 1962 wards remained in place.

If malapportionment was the dominant reason for the post-1945 pro-Labour bias, relatively frequent redistrictings would have mitigated the bias. Figure 12 shows the net bias figure less the mal-

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23 The full algebra for this measure is in Brookes, “Analysis of Distorted Representation,” and Johnston, “Spatial Structure, Plurality Systems and Electoral Bias,” Canadian Geographer, XX (1976), 310–328. The basic arguments have been further rehearsed in Johnston et al., Seats to Votes. In effect, Brooke’s algebra evaluates what proportion of the bias is attributable to variations between the two parties in the relative size of the wards that they would win with equal vote shares, the relative turnout in the wards that they would win, and the relative efficiency of their vote distributions (the ratio of effective to wasted and surplus votes).
Fig. 9 Moving-Average Trends in the Standard Deviation of Ward Electorates in Elections, 1919–2000, by Redistricting Period

Apportionment component (the trend in Figure 6 less that in Figure 10). Even after removing the malapportionment effect, however, pro-Labour bias characterizes much of the period since 1945, again peaking at ten seats out of thirty-nine contested in 1996. Malapportionment was clearly not the whole story.

Closely associated with electorate size as a potential source of bias is turnout: The smaller the turnout in a ward, the smaller is the number of votes needed for victory there. A party that performs well in low-turnout wards tends to get more seats for the same number of votes than one that achieves its main successes in wards with high turnout, assuming no variation in electorate size across the wards. Since 1945, Birmingham’s turnout was often lower in wards that would have been won by Labour with equal vote shares than those that would have been won by its opponent (see Figure 13). It averaged 2.4 percentage points less in Labour- than in Conservative-held seats, with a maximum of 5.5 points. These turnout variations favored Labour at virtually every election since
1945, as the graph of the turnout bias component shows (see Figure 14).\textsuperscript{24}

Do the differences in turnout as well as in ward electorate account for all of the bias? Figure 15, which shows the net bias less those two components (Figure 6 less figures 10 and 14) suggests not. The bias is reduced, in some cases favoring the Conservative rather than the Labour party, but it still averages a surfeit of 2.5 seats to one party or another.

Three other components, according to the method of decomposing bias employed herein, might be involved. The first two relate to the impact of third parties. In a ward with 5,000 electors, all of whom vote, and only two parties contest a vacancy,

\textsuperscript{24} Turnouts were high in 1979 because the city-council elections were held on the same day as the general election.
2,501 votes are needed to win. If a third party wins 600 votes, however, and the two main parties are competing for the remaining 4,400, only 2,201 are needed for victory. If the third party wins 1,200, the number required for victory among the other two falls to 1,901. In other words, the impact of third parties is similar to that of ward electorates and turnout variations: The larger the number of votes won by third parties, the smaller is the number needed for victory by one or the other of the two main parties—with one exception: If a third party wins a ward, it denies it to one of the two main parties (identified herein as the party that comes second in the ward).25

Fig. 11 Moving-Average Trends in the Malapportionment Bias Component, 1919–2000, by Redistricting Period—Positive Indicates Net Bias to Labour, Negative Net Bias to the Conservatives

If the third party had performed much less well, the third-placed rather than the second-placed party might have won the ward, because the third party drew most of its support from it. No data are available to assess whether this was ever the case.
In general, third parties—Liberals, independents and others—have been more likely to stand in Labour-held than in Conservative-held wards, although until 1945, such contests were rare. Only since 1970 have the Labour and Conservative parties faced contestants from other parties in a majority of the wards that they contested themselves. But the third parties have performed better, on average, in Conservative- than in Labour-held wards with equal vote shares (Figure 16), suggesting that this bias component should have aided the Conservatives.

The two third-party bias components, as shown in Figure 17, had virtually no impact prior to the 1960s. For two decades, the wins component was pro-Conservative, because the small number of third-party victories tended to be in wards that Labour would otherwise have won. In the 1980s and 1990s, this trend reversed, except in 1992. In the last three contests reviewed herein, it again
favored the Conservatives, as Labour lost seats to a third party. The impact of third-party votes was much slighter, to the benefit of the Conservatives (as expected) from the late 1970s onward, except in 1992 and from 1998 to 2000 when greater third-party activity reduced the number of votes needed for victory in Labour-held wards. Overall, the net impact of the third parties (the sum of the two components) has been almost negligible. Together, the two components were worth about two seats to the Conservatives from the 1960s to the 1980s, and six at the end of the 1990s. The “Liberal revival” at the end of the century gave the Conservatives a significant boost, however, when the party’s electoral performance in the city as a whole was at a low ebb.

Finally, the efficiency component measures the votes wasted in winning or losing a given number of seats. If a party wins a ward by a large margin, it amasses a lot of surplus votes that bring it no return in terms of extra seats. If it loses by a small margin, it also garners a lot of wasted votes. The optimum distribution of votes

Fig. 13  Average Turnout in Wards that Would Have Been Won by Each Party with Equal Vote Shares, 1919–2000

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for a party involves not winning by too large a majority in its own wards, and losing by large majorities in those won by its opponent. It should minimize both its surplus votes per seat won and wasted votes per seat lost, thereby maximizing its effective votes. The extent to which parties differ in this respect reflects the distribution of their votes. If one party’s votes are concentrated in a small number of wards, it will reap numerous surplus votes. Figure 18 suggests that for much of the twentieth century, Labour had a more efficient distribution than the Conservatives did, by as many as ten seats on three occasions. But in general, the impact was slight; this component averaged slightly more than three seats throughout the full set of sixty-six elections.  

This analysis of the fine-grain operation of local electoral bias in Birmingham covers most of the twentieth century and great

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26 Efficiency is the goal of many gerrymanderers in the United States.
changes in the pattern of party competition and partisan support in one of Britain’s largest cities. From the outset, the Liberals in Birmingham were in electoral free fall. Within a decade of the new local authority’s creation, the serious battle for votes lay between Labour and Conservative/Liberal Unionist candidates. That situation would not alter materially until the 1980s when the initial shock delivered by the arrival of a new center party (the SDP)—then sustained by the Liberals and successor party, the Liberal Democrats—would contribute to further change. From being a city of two-party politics, Birmingham became multi-party, so much so that in the mid-1990s, the Liberal Democrats almost replaced the Conservatives as the principal opposition to Labour. Before World War II, the Conservatives had uninterrupted control; after the war, the party found itself in opposition for substantial periods, punctuated only briefly by periods of power. The contrasting fate of Birmingham Conservatives before and after
World War II captures the sense of political change. Rapid expansion of the city’s electoral boundaries, changing demographics, a growing threat from Labour and the Conservatives’ own difficulties in presenting a strong challenge at local elections, all combined to shape political control in the city.

Electoral bias also belongs on that list of factors. In almost every year since 1911, two features of the election results stand out in this analysis of electoral disproportionality and bias. First, whatever party won the battle for votes had a greater advantage in the allocation of seats, though to different extents. Generally speaking, the more votes the leading party captured, the greater was its winner’s bonus. The other main feature of our findings is that the winner’s bonus has not favored the two main parties equally. Labour has received more of an advantage from disproportionality than the Conservatives. Before 1950, the Conservative seats-to-votes ratio was higher than Labour’s, but Labour’s average ratio
increased annually afterward, especially after 1980, while the Conservatives’ declined, sometimes dramatically. This finding is crucial, particularly when majority control of the Council hinged on the distribution of seats in a handful of wards. Electoral-system bias was undoubtedly the crucial factor in determining which party ran the city administration on more than one occasion.

The explanations for changing seats-to-votes ratios emerge when the different elements that contribute toward electoral bias become visible. Malapportionment, the growing inequality in electorate sizes, has clearly been influential in shaping the size and direction of bias. Until the mid-1930s, the fact that Labour’s wards were larger than those controlled by the Conservatives simply reflected the geography of the city’s population growth. Thereafter, however, the advantage from creeping malapportionment began to favor Labour as its electoral strongholds began to coincide
with population out-movements, particularly from within the inner city. In the postwar era, this phenomenon accelerated, especially during the 1970s. Periodic boundary reviews ameliorated, though did not remove, this effect. However, other processes besides malapportionment are also necessary to explain electoral bias in Birmingham.

Three other features of the electoral system have served Labour well. After 1945, turnout was lower at nearly every election in wards won by Labour than those won by its principal opponent. Lower turnout has meant that Labour’s successful candidates have captured a lower proportion of support from the ward electorate than have the Conservatives’. While turnout remains low, this aspect of electoral bias will continue to aid Labour’s electoral position. Labour amasses fewer surplus votes in the wards that it wins, not only because these wards are, on aver-
age, smaller but also because turnout is lower there than in Conservative-won wards with equal vote shares.

Though contributing less to electoral bias, third-party candidates have presented a challenge to the two-party system through votes and victories. Because of the pattern of contestation, the effects were minimal until the 1960s. Since then, however, third-party votes have generally favored Birmingham Conservatives, since such candidates generally performed better in Conservative-held wards, leaving that party with a lower threshold for victory. This bias toward the Conservatives also followed, for a short period, from third-party victories that tended to be at Labour’s expense. After the Conservative general election win in 1979, that process went into reverse as Liberals successfully unseated Conservatives. A similar reversal also appears to be affecting Labour after its 1997 general-election victory. The third-party bias components sometimes tend in opposite directions, with one element favoring Labour and the other favoring the Conservatives, producing a small net effect overall.

Taking the twentieth century as a whole, Labour’s vote distribution across the contested wards was superior to that of the Conservatives. Labour amassed fewer surplus votes where it won and fewer wasted votes where it lost (with equal vote shares). On occasions, Labour’s advantage in the efficiency component was large, but in terms of overall electoral bias, it averaged about three seats in Labour’s favor.

This type of analysis has become possible only because of the recent availability of Birmingham’s local-election results from 1911. Eventually, similar data from the other county boroughs in the major population areas will facilitate new inquiries into the pattern of local voting behavior. At the micro-level, we will be able to observe, for example, how the influx of women candidates and councillors has challenged the massive dominance of males, both at the hustings and in the Council Chamber. Aggregate voting data will also permit an examination of whether local democracy ever had “a golden age” when voters had clear choices and turned out in larger numbers to vote for them. New data will bring to light, virtually for the first time, the dynamics of the party system at the local level and the distinct part played by the operation of the electoral system itself. Birmingham’s experience may prove typical but, given the changes after 1973, different cities, at
different times, probably had unique experiences. Historians will be better equipped to understand the complex relationships associated with a party’s success and failure at the local level and how they informed or reflected performance in Parliamentary elections.27

In a wider context, this analysis of the situation in Birmingham parallels those produced by studies of British general election results, for which the same (plurality) electoral system is deployed, with regular redistributions to correct variations in electorate size only since 1945. A system that long favored the Conservative party now favors Labour in both sets of elections; this shift has been particularly evident since 1990. From its position as a party treated unfairly by the operation of the electoral system—in Britain as a whole as well as in Birmingham—Labour has emerged as a substantial beneficiary, with large majorities in the House of Commons and in Birmingham’s Council Chamber.28

Labour’s growing advantage has largely occurred during a period when inner-city–ward (and, as a consequence, Parliamentary–constituency) electorates, as well as turnout, have been declining—more so in the inner cities than elsewhere. As a consequence, Labour has enjoyed a much better return for its vote total than have the Conservatives; fewer votes elect a Labour City Councillor than her/his Conservative counterpart. In addition, at a number of elections, Labour has had a more efficient distribution of support across the ward (constituency) map, in part because of Labour’s growing strategic sense that the most successful electoral campaigns are those targeted on the seats that matter. The party does not work to garner votes in those places where they will not produce electoral rewards, either because of easy wins or obvious losses. Labour strategists have been much more adept at such geographically focused campaigns than their Conservative opponents since the early 1990s (the Liberal Democrats have been even more effective than Labour at such strategies but on a much more restricted canvass).

Geography has been crucial to the pro-Labour shift in the operation of the United Kingdom’s electoral system—in both Par-

27 Rallings and Thrasher, Local Elections in Britain (London, 1997).
28 The general election analyses for the whole century are reported in Johnston et al., “Conservative Century.” More detailed analyses of the post-1945 trends can be found in Johnston et al., Votes to Seats; idem, “Labour Electoral Landslides.”
liammentary and, as this example from Birmingham has shown, local government scales. But Labour has not manipulated geography in the way that Democrats and Republicans have engineered both malapportionment and gerrymandering in the United States. The changes in constituency size and turnout have been endogenous, and the drawing of ward and constituency boundaries undertaken by neutral bodies. Labour has cannily learned how to maximize the advantages that these changes present.