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Danny and Ben analyse the patterns revealed when the UK's 2015 General Election results are displayed on population cartograms.



The UK 2015 General Election

The UK General Election of 2015 was held on 7 May and the results were remarkable. The nations of the once-United Kingdom divided in a way that has not been seen for at least a century. A new major third party, the Scottish National Party (SNP), emerged as a significant force, taking 56 of the 650 parliamentary constituencies. Previously the best the SNP had managed was just 12 of Scotland's 71 seats, in 1974. The last time a third party rose so quickly and so strongly was in 1918, when Sinn Féin (Irish for 'we ourselves') won 73 seats across Ireland in the last General Election before the formation of the Irish Free State in 1922. The SNP secured fewer seats in 2015 because there were hardly any more they could win: SNP candidates only stood for election in Scotland, and the total of Scottish seats is 59. The Conservative, Labour and Liberal parties each held one of the remaining three Scottish seats: elsewhere in Scotland their share of the vote was minimal.

Conventional maps of the UK usually show each part of the country in rough proportion to its land area (Figure 1). But Scotland contains proportionately more land than people, and as it is people who get to vote, its rural constituencies are much larger than in most of the UK. Because of this the SNP's victory is over-emphasised on the traditional map – Scotland did not receive the share of the overall vote that it might imply. Furthermore, the three constituencies that the SNP failed to win in Scotland are shown very differently on the conventional map. The Liberals only held one seat, Orkney and Shetland, but this thinly populated area figures very large on the conventional map: they appear to have done far better. Similarly, the Conservatives held on to the single rural constituency of Dumfriesshire, Clydesdale and Tweeddale, which looks very large on the conventional map. In contrast, a tiny speck of red on the conventional map represents Labour's hold of Edinburgh South. The election result has radically changed politics in Scotland: but Scotland is only a small part of the UK.



Figure 1: The May 2015 UK General Election winners – a conventional map, showing each part of the United Kingdom in rough proportion to its land area.

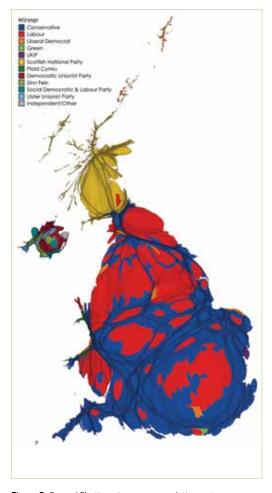


Figure 2: General Election winners – a population cartogram, in which area is proportional to population, not land area. The key to places on this cartogram is available to download.

The Conservative majority

The conventional map also over-emphasises the Conservative victory – contrast the near-solid blue block in Figure 1 with the attenuated ribbons of blue in Figure 2. In fact, looking at Figure 2 it is quite hard to see how the Conservatives were able to form a government. This is partly because area in the cartogram is drawn in proportion to total population, not just those who are on the electoral roll and chose to vote; but also because the Conservatives only just won a majority of seats – 330 out of a total for the UK of 650 – so the blue areas are only just a majority of the area in the map.

Hardly any trace remains of the Liberal Democrats, who managed to hold on to only eight seats. One reason for the Conservative victory was that they took 26 seats from the Liberal Democrats. The Conservatives polled the most votes, some 11.3 million, mainly increasing in the areas where they were already most popular. The Conservative change cartogram (available to download) shows that the Conservative vote actually fell in 240 constituencies and rose by less than 2% of the available electorate in a further 137 seats. Almost always this was because they picked up support (net) from former Lib-Dem voters. The Conservative share cartogram (available to download) shows clearly that Conservative support is strongest in rural areas and weakest in Scotland, Northern Ireland and most large cities.

So how did the Conservatives win the 2015 election? Their victory is down to a number of factors. The rise of the SNP and the United Kingdom Independence Party (UKIP) split the opposition. Pre-election polling by Ipsos MORI, adjusted for the actual results, shows that Labour had a clear lead only amongst younger women, voters in social class DE, private and social renters, and black and minority ethnic voters (Skinner, 2015). The cartogram in Figure 3 demonstrates that turnout was higher in areas where people were more likely to vote Conservative and where population turnover, poverty and economic precarity were lower.

Other political parties

There was also a relatively new political party in Britain. UKIP, formed in 1993, made little impression on general elections until 2015, when it won 12.6% of the 30.7 million votes cast. This made it the third largest party by popular vote, but even so, because of the 'first past the post' electoral system, it only secured one seat at Westminster. There was a swing to UKIP in more northern, less affluent areas (see the cartogram available to download) but not in London. The rise of UKIP reflects the trend in continental Europe, where most countries have a far-right, nationalist party that draws much support from economically depressed areas where people fear change and population mobility. The Green Party also performed well in the election, securing 1.2 million votes (3.8%); but again secured just one seat. A cartogram (available as a download)



Figure 3: Cartogram of the turnout for the General Election. The key to places is available to download.

reveals that their share of the vote increased most in areas of high population density. Under a system of proportional representation, more people might have voted Green, as they do in much of the rest of Europe where such voting systems exist.

The Labour party vote

Finally there is the main opposition party. Apart from in Scotland, Labour saw their support rise most where they were already strongest, and the map of Labour support (available as a download) shows that their appeal to voters across the UK was far more widespread than that of the Conservatives: but the distribution of their support was less favourable to them than the distribution of Conservative support. Losing all but one of their seats in Scotland did not change the electoral arithmetic because the Liberal Democrats and Conservatives did not win any of those Scottish seats from Labour.

Voting and the electoral system

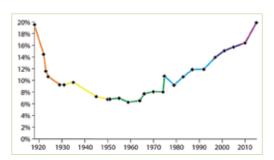
Despite nearly all the polls suggesting that the election was going to be too close to call, almost 16 million people, 33.9% of the electorate, eligible and registered to vote, did not vote. Some of this may be down to voter apathy; however, many of those non-voters may have been unable to vote because they had moved away from their registered address within the past year or two and failed to register at their new address. We do know that population mobility is increasing: fewer people

stay in the same home for long, and many have to move for work reasons. Another cause may be changes to the voter registration system: since 2014 it is no longer possible for one member of a household to register all the voters there, or for universities to register all their students.

The results of UK elections are not just affected by how many votes a party wins, but their distribution. If the number of parliamentary seats were proportional to the votes cast, and as many people had voted for each party as did under the current 'first-past-the-post' system, the number of Conservative seats would have fallen from 331 to 239, Labour from 232 to 197 and the SNP from 56 to 31. Northern Irish parties would still have some 18 seats, if the voters there were not given the option to vote for any other parties. On the other hand, Plaid Cymru seats would have risen from three to four, Liberal Democrat from eight to 51, Green from one to 24 and UKIP from one to 82. In these circumstances it is easy to see that many voters might become disillusioned with the electoral system: their votes appear not to matter. It is possible that under a proportional voting system more people would

Figure 4: The concentration of Conservative votes (1918–2015). This is the minimum proportion of Conservative voters who would have to move seats if there were to be an even spread of such voters at each election. It is a segregation index (see online material for further explanation and the table of data).

Figure 5: Cartogram showing the general election winners hold or gain.





vote and the electoral landscape would change. This is speculation: but in mainland Europe, which does have more proportional voting systems, many more parties are represented in government.

Voter concentration

The 2015 General Election was a potential watershed. The graph (Figure 4) shows how the votes for the Conservative Party became more geographically concentrated across the UK than they had been even in 1918. 1918 saw the election of some 73 Members of Parliament for a third nationalist party in Ireland and the breakaway of the Republic, eventually by popular support although the full story is far more tortuous and complex than that (some people in Ireland call it a revolution). The statistic being plotted in the graph is the minimum proportion of Conservative voters who would have to move between parliamentary constituencies if there were to be an even spread of such voters across the UK. This measure of segregation rose dramatically between 2010 and 2015 only because of rising political polarisation within England. The political geography of the UK has never been as divided as it became in May 2015.

Little change?

The map showing which party won or held each seat and which party had held it before 2015 (see Figure 5) gives an impression of little change. When it comes to the 650 parliamentary seats, in percentage terms that is true. Although 56 of the 59 Scottish seats, and 37 of the 46 held in England and Wales by the Liberal Democrats, changed hands, and two changed in Northern Ireland, of the two main political parties Labour won 10 seats from the Tories and lost eight to them. In total 113 seats (17%) changed hands: 83% did not.

In terms of votes cast, however, the picture is very different. After the election newspaper headlines were dominated by the collapse of the Liberal vote and the surprise Conservative overall majority, but the other story was of fundamental change. The rise of UKIP and the Green Party, in terms of votes cast, if not parliamentary seats, split the opposition to the dominant Conservative force in British politics. Conservative seats were becoming more Conservative, Labour seats more Labour, and with the near-annihilation of the Liberal Democrats, the party of 'the middle', the country polarised politically.

So what will happen next?

Figure 6 shows which parties are now the major challengers in each seat across the UK. Blues and reds dominate. Labour has become again the major opposition in almost all of the South of England (but it is a long way behind in many areas). There is a smattering of seats in which the Greens came second, more where UKIP and the Liberals are the (often distant) challengers. Thus in a 'first-past-the-post' election it is again a two-horse-race: Labour verses Tory. However, if the



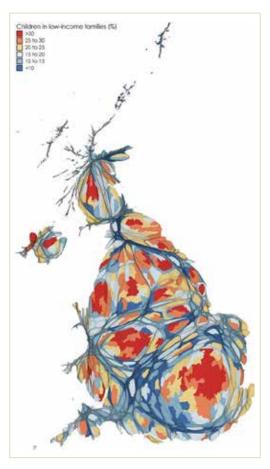


Figure 6: Cartogram of General Election runners-up. The key to places is available to download.

Figure 7 (right): Cartogram showing percentage of children living in low-income families. The key is available to download.

Danny gave the Keynote Address at the GA Annual Conference in April 2015. Videocasts of extracts of his lecture, 'The geography of elections: will the 40 years of voting polarisation continue in May 2015?' can be found at www. geography.org.uk/resources/videocasts

Labour Party is to be as popular as the Tories are today they will need to increase their share of the vote by 12.5% – as much as UKIP's total vote.

Registering to vote

Registering to vote matters. Before the next election – 2020 if not before – there will be a boundary review. The boundaries of parliamentary constituencies will be redrawn according to the number of people who are registered to vote in each area by autumn 2015. Register to vote now and you change the very boundaries of the constituencies that candidates will contest at the next election, and possibly several elections to come. If people in urban areas do not register now (see Figure 7), then even

if there is a majority vote against the current government in 2020 that majority may not win enough seats to form a government. Geography matters when it comes to politics in the UK – it matters more than it ever has before.

Polling by Ipsos MORI on election day showed that turnout fell by 8% among men aged 18-24 (only 42% of whom voted). It also fell by 4% among private renters (only 51% of whom voted). It fell by 1% among the poorest social classes in the UK ('semi-skilled' and 'unskilled' workers, only 57% of whom voted). A huge number of young, poor and precariously housed people could have voted, but didn't. One day they could matter electorally far more than they matter now. Your students could easily be among them.

Online resources

The cartograms referred to in this article are available to download. Go to www.geography. org.uk/tg and click
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