

Extremes and factions ... Middle Voter Democracy

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UK Prime Minister Theresa May warned against the idea that “mobilising your own faction is more important than bringing others with you ...”¹

UK Prime Minister Boris Johnson has sent a letter to an estimated 400,000 civil servants:

“My approach to Brexit is simple, and I want you to be in no doubt about it. We must restore trust in our democracy, and fulfil the repeated promises of Parliament to the people, by coming out of the European Union on 31 October. We will be leaving on this date, whatever the circumstances ...

... [I] would very much prefer to leave with a deal, one that must abolish the anti-democratic Irish back-stop, which has unacceptable consequences for our country.

But I recognise this may not happen. That is why preparing urgently and rapidly for the possibility of an exit without a deal will be my top priority, and it will be the top priority for the Civil Service, too.”²

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¹ Elliott, Francis. “Stay out of the gutter, Mrs May tells frontrunner.” *The Times*, July 18, 2009: 7.

² Tominey, Camilla. “Johnson sends Brexit message to every civil servant.” *Daily Telegraph*, August 10, 2019: 6.

1 Introduction

Brexit? ...

Which *option* should be chosen? Which *criterion* should be used to select an option? These are the questions addressed by voting theory and social choice theory. One well-regarded criterion is the Condorcet criterion. A key result is that under certain circumstances the best option according to the Condorcet criterion is the option which is preferred by the *median* voter.

A somewhat different approach is adopted in what I have referred to as optimal social design. A key result here is that under certain circumstances the best option (that is, the one maximising total utility) is the option which is the *mean* of the individuals' most preferred options.

In some circumstances these two approaches satisfy another criterion: the minimisation of polarisation.

Rather loosely I shall refer to the two approaches as involving the 'middle voter'. I define *Middle Voter Democracy* to be the selection of either the median voter option or the mean ideal option – regardless of whether the above-mentioned special circumstances hold or not.

On October 31st the UK is set to leave the European Union. UK Prime Minister Boris Johnson claims that he wants a deal - but his government is feverishly preparing for No Deal. Meanwhile Remain MPs are planning to hold a vote of no confidence in the prime minister when parliament resumes in September. The prime minister might then call a general election for November 1st, allowing No Deal to happen the previous day. Indeed, according to opinion polls, only if No Deal happens can Boris Johnson win the election. What will then have happened is that the *extreme* option of No Deal has occurred - and neither the *middle* option of a deal nor the *other extreme* option of Remain has occurred.

Of course a middle option already exists – it is Mrs May's deal. However Mrs May's deal has been voted down three times by parliament. It was voted down by a combination of Remain MPs and MPs wanting a harder Brexit. What happened was that the *middle* option was defeated by a combination of the two *extremes*.

In 2016, a middle option did not exist: the referendum only offered two options, Leave or Remain. The majority voted Leave. Thus the referendum involved two features which have been condemned repeatedly by Peter Emerson. He argues that the set of options should not contain just two items but rather three or preferably more options. Furthermore he argues that the winning option should not be selected on the basis of a majority criterion but rather according to a Modified Borda Count (the option having the best mean ranking).

Like Peter Emerson I disapprove of using just two options and of using the majority criterion. I am sympathetic to the Modified Borda Count (MBC). However in some of the studies I have done comparing many different criteria, the middle voter criterion and the polarisation minimisation criterion recommend options which are different

from that recommended by MBC. My Brexit website pursues many of these ideas in greater detail.

The notions of ‘extreme’ and ‘middle’ imply a space and so the concept of space is central to what follows. Furthermore the notions of ‘extreme’ and ‘middle’ relate to the distribution of people in space and so the concept of a distribution is also central.

2 Group A and Group B

In what follows we shall repeatedly be referring to Group A and Group B ...

... Let us put the political parties into two groupings. Group A consists of the Conservative Party, the Brexit Party and UKIP. Group B consists of the Labour Party, the Liberal Democratic Party, the Green Party, the Scottish National Party and Plaid Cymru. Group A is on the Right and is for Leave. Group B is on the Left and is for Remain (assuming the Labour party is moving in that direction).

3 No Deal: only this extreme can give Boris victory

The Brexit extreme of No Deal is now quite likely. Before discussing this, let us remind ourselves of what the likely outcomes looked like back in Spring 2019:

The extension of the Brexit deadline to October 30 2019 has now allowed attention to turn to the local (2nd May) and EU elections (23rd May 2019) ...

What can Mrs May achieve before her party removes her? Can her party remove her? Can a deal be reached and the EU elections avoided? Can a deal be reached and the sitting in the European Parliament of newly elected UK EU MPs be avoided? Are Mrs May and Jeremy Corbyn waiting until after the local elections before they reach an agreement? ... before they abandon their talks? ...

The local elections have now taken place. Can Mrs May hang on? Talks continue but now we are too late to avoid having to take part in the EU elections ...

We now return to the present. The new UK Prime Minister Boris Johnson had said there was only a million to one chance of No Deal. However, a week ago, James Bartholomew saw the chances differently³:

- 35% UK leaves the EU on 31 October without a deal.
- 30% UK leaves the EU with a revised version of Mrs May’s Deal.
- 20% Brexit is postponed again.
- 5% Boris Johnson secures a good deal.
- 10% some other outcome.

There has been a lot of speculation that there might be a general election soon. How might the results of such an election depend on what was happening in relation to Brexit? It has been argued that in order to win an election the Conservatives need to win back voters from the Brexit Party and for that to happen they need to deliver Brexit. They need to become more extreme on the Brexit dimension. A survey considered the following four scenarios:

³ Bartholomew, James. “Diary of a private investor. Brexit could come to a conclusion in 89 days – or not. Here’s how four possible outcomes will affect British share prices. ... If Brexit is postponed the Conservatives will have failed again – I’d reduce my UK holdings.” *Daily Telegraph, Money*, August 3, 2019: 8.

A general election is held ...

1 ... after the UK leaves the EU with no deal.

2 ... before October 31, and the UK has not yet left the EU.

4 ... after the UK has left with a similar withdrawal agreement to that negotiated by Theresa May.

3 ... after extending the Brexit deadline beyond October 31.

[My re-ordering is to help look at Table 1.]

Table 1 below shows that the harder the Brexit situation, the greater the support for the Conservatives and the lower the support for the Brexit Party ... and the greater the number of Conservative seats in parliament. (Note though that the inference from voter support to seats is not a straightforward one.) The headline is that “Johnson ‘can only win election if vote is held after no-deal Brexit’.”

Note that the support for individual parties in Group B does not change across the four scenarios – a contrast with the large changes in support for individual parties in Group A across the four scenarios.

Table 1 The support for the parties and possible seats in parliament for four different scenarios.⁴

Apologies for missing entries: my information is incomplete.

| | Group B | | | Group B ... | | Groups B v A |
|----------------|---------------------|--------|--------|------------------|--------|-----------------|
| | Green | LibDem | Labour | Cons | Brexit | |
| | percentage vote | | | | | |
| 1 No Deal | 6 | 15 | 29 | 36 | 8 | 50 v 44 |
| 2 Not yet left | 4 | 16 | 27 | 28 | 19 | 47 v 47 |
| 4 May’s deal | 7 | 15 | 29 | 26 | 18 | 51 v 44 |
| 3 Extend | 5 | 16 | 28 | 22 | 23 | 49 v 45 |
| | seats in parliament | | | | | |
| 1 No Deal | | 26 | 210 | 357 | 0 | |
| 2 Not yet left | | 42 | 257 | 268 | 25 | |
| 4 May’s deal | | | 295 | | | |
| 3 Extend | | | 225 | 93 | 170 | |

Group A: Conservative, Brexit, UKIP;

Group B: Labour, LibDem, Green, SNP, PC, Change.

So Boris Johnson might well be attracted to the idea of a No Deal Brexit followed by winning a general election. But perhaps MPs can vote to prevent a No Deal or force a general election before No Deal happens. However, contrary to that, is the view that it is now too late. Parliament is in recess and MPs return on September 5th. Suppose they won a vote of no confidence in Boris Johnson. Boris would have 14 days to try to win a second vote. If that failed he could call a general election - with parliament dissolved for 25 working days beforehand during which time MPs would be helpless

⁴ Hyman, Charles. “Johnson ‘can only win election if vote is held after no-deal Brexit’.” *Daily Telegraph*, August 2: 4.

Com Res, Britain Elects
<https://www.comresglobal.com/>
<https://britainelects.com/>

to stop No Deal. The election might then be held after the 31st October, after No Deal had happened. In an ORB poll, “46% said that if the EU is unwilling to re-open negotiations on the withdrawal agreement, the UK should leave without a deal.”⁵

4 Space

4.1 ‘The people’ ... a two-dimensional space

‘The people’. The people voted for Brexit. The people deserted the Conservative party and joined the Brexit Party. The people want No Deal. Boris Johnson needs to win the people back if he is to win the next general election ... “Johnson lays ground for ‘people v politicians’ poll.” The people want a strongman in No 10.⁶

So who are ‘the people’? Are ‘the people’ ALL the people? If not, who are the other people?

Sometimes people say not that “the people voted for Brexit” but that “the left behind voted for Brexit”. So who are ‘the left behind’?

One organisation investigating these questions is *Onward*, “a powerful ideas factory for centre-right thinkers and leaders.” “On Thursday 8th August, *Onward* launched a new project – *The politics of belonging* – to be led by Lord James O’Shaughnessy and Will Tanner. On the morning of the launch we published new polling by Hanbury Strategy showing the shift away from a post-war freedom consensus to a post-Brexit consensus shaped by security.” Some of the people in Hanbury Strategy have backgrounds in political campaigning, working for the Conservative, Liberal Democrat and Labour parties.⁷

“Using a basket of questions, we devised four broad definitions of freedom and security”. This corresponds to two dimensions: an economic dimension and a socio-cultural dimension. Each of the two dimensions has freedom at one extreme and security at the other. A graph plots economic security E versus social-cultural security S. The graph shows a quite dense scatter graph of points ... a skewed unimodal distribution of people in two-dimensional economic and social-cultural space. I estimate the principle component of the points to have the equation:

$$(E-300) = 3(S-300)$$

⁵ Malnick, Edward. “MPs told: it’s too late to stop no deal. Even no-confidence vote in Johnson as soon as Commons returns after summer cannot halt Oct 31 Brexit, says No 10 aide Cummings.” *Daily Telegraph*, August 4, 2019: 1-2, 17.

⁶ “Johnson lays ground for ‘people v politicians’ poll.” Kate Devlin. *The Times*, August 5, 2019: 1. Tominey, Camilla. “Millenials favour a strongman in No 10.” *Daily Telegraph*, August 8, 2019: 4. Wright, Oliver. “Younger voters want ‘strongman’ leader.” *The Times*, August 8, 2019: 8.

⁷ <https://www.ukonward.com/about/>; <https://www.ukonward.com/thepoliticsofbelonging/>; <https://www.ukonward.com/wp-content/uploads/2019/08/Politics-of-Belonging-Deck-v.4.pdf>; www.hanburystrategy.com/polling; Hanbury Strategy <https://hanburystrategy.com/>;

“Johnson lays ground for ‘people v politicians’ poll.” Kate Devlin. *The Times*, August 5, 2019: 1. Tominey, Camilla. “Millenials favour a strongman in No 10.” *Daily Telegraph*, August 8, 2019: 4. Wright, Oliver. “Younger voters want ‘strongman’ leader.” *The Times*, August 8, 2019: 8.

The mode is at the centre of the space (300,300) and the median at (300+x,300+3x) for some $x > 0$. Variation in E is greater than variation in S and also more skewed. There is a moderate correlation between E and S.

I would like to suggest that when one wants to think about ‘the people’ then it would be useful to think of a distribution of points rather like the one I have just described.

Another organisation investigating these questions is *UK in a Changing Europe*.⁸

“The UK in a Changing Europe promotes rigorous, high-quality and independent research into the complex and ever changing relationship between the UK and the European Union (EU).

It provides an authoritative, non-partisan and impartial reference point for those looking for information, insights and analysis about UK-EU relations that stands aside from the politics surrounding the debate.

The Initiative’s work is tailored to be easily accessible to policy makers, businesses, journalists, civil society organisations, educational institutions and the general public who are interested in the UK’s relationship with the EU.

Funded by the Economic and Social Research Council (ESRC), and based at King’s College London, the Initiative will explore the key aspects of UK and EU dynamics, including:

- Impact of EU policies: how EU policies make a difference in areas such as, the single market, financial regulation, trade, investment, growth and the free movement of people
- Attitudes towards the EU: social and political attitudes, the nature of euroscepticism, generational differences, the media’s role
- A Changing UK in a Changing EU: differences in public opinion in England, Northern Ireland, Scotland and Wales; implications of constitutional changes in the UK and implications of British exit for different parts of the UK.

The research findings will be presented through events, workshops, debates, talks, e-books, briefing papers, reports, blogs, social media and the press.”

One of their reports is *Brexit and Public Opinion 2019*.⁹

Sara Hobolt “... shows just how polarized the two groups have become. Remainers and Leavers both describe each other as “hypocritical”, “selfish” and “closed-minded”, and their own group as “honest”, “intelligent” and “open-minded”.”¹⁰

Paula Surridge discusses a two-dimensional space rather similar to the space discussed in the Onward report (see above). Similar to Onward’s economic scale is a Left-Right scale. Similar to Onward’s social-cultural scale is a Liberal-Authoritarian scale. These two dimensions have long been recognised: Surridge cites an article by Heath, Evans and Martin in 1993 which in turn cites a literature going back at least to Converse in 1964.¹¹

⁸ <https://ukandeu.ac.uk/about-us/>

⁹ <https://ukandeu.ac.uk/wp-content/uploads/2019/01/Public-Opinion-2019-report.pdf>;
<https://ukandeu.ac.uk/new-report-reveals-brexit-identities-stronger-than-party-identities/>

¹⁰ <https://ukandeu.ac.uk/emerging-brexit-identities/>;

¹¹ <https://ukandeu.ac.uk/the-values-divide-means-voters-can-switch-parties-more-easily/>
https://www.jstor.org/stable/194188?seq=1#page_scan_tab_contents

Left-right scale

Government should redistribute income from the better off to those who are less well off
Big business benefits owners at the expense of workers
Ordinary working people do not get their fair share of the nation's wealth
There is one law for the rich and one for the poor
Management will always try to get the better of employees if it gets the chance

Liberal-authoritarian scale

Young people today don't have enough respect for traditional British values
People who break the law should be given stiffer sentences
For some crimes, the death penalty is the most appropriate sentence
Schools should teach children to obey authority
Censorship of films and magazines is necessary to uphold moral standards.

4.2 A spatial approach: the 2015 Yearbook

The spatial approach which I am adopting here was a central theme in my 2015 Yearbook. Different chapters covered psychological, social, political and geographical space. See Table 2.

Table 2 The chapters in *Values, World Society & Modelling Yearbook, 2015*

| | |
|----|--|
| 1 | Introduction and Overview ... Arts and Science |
| | <i>Values</i> |
| 2 | Transcending adversarialism: The John Burton Memorial Lecture 2015 |
| 3 | Life as a journey |
| 4 | 'Our values': the Enlightenment ... the Prophet |
| | <i>World Society</i> |
| 5 | World society in 2015 |
| 6 | Social and psychological space - geographical variation |
| 7 | Time series: social value, violence and population |
| 8 | Nigeria, Greece and Ireland: geography and one-dimensional political space |
| 9 | Northern Ireland: multidimensional political space and geography |
| 10 | The UK general election, 2015: prelude and outcome |
| 11 | Democracy: satisfaction? ... dissatisfaction? ... value space |
| 12 | Time series: UK general elections - 1945 to 2015 |
| | <i>Modelling</i> |
| 13 | Sets and functions; time and space |
| 14 | Value spaces; the earth in space and time |

4.3 The Brexit referendum 2016: a spatial approach

My analysis of the 2016 Brexit referendum covered economics, social, politics, geography and psychology aspects, sometimes adopting a spatial approach.¹²

P. Converse. 'The nature of belief systems in mass publics', in D. Apter. Ed. *Ideology and Discontent*. (New York: Free Press, 1964).

¹² Brexit referendum 2016

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDoyNDQ3ZmQwODFjNmViZjky> or see my Brexit website.

4.4 Political space: Left-Right and Leave-Remain

What happens in politics can be thought of as occurring in a political space. This space has a large variety of dimensions with different dimensions being salient in different contexts. However it is sometimes helpful to think of the space as having just a few dimensions. Often only one dimension is considered and this is usually the Left-Right dimension.

Since the 2016 referendum, Brexit has been the central issue in UK politics. Opinion on this issue does not seem to relate in a simple way to the Left-Right dimension in that the two main parties of the Left and Right, Labour and Conservative, are both split on this issue. This suggests that it may be helpful to think of a Brexit dimension, with the extremes of Leave and Remain, separate from the Left-Right dimension.

We envisage a two-dimensional political space as represented in Figure 1.

Figure 1 Two-dimensional political space: Left-Right and Leave-Remain



4.5 Parties in two-dimensional political space

Parties are often seen as having a location in political space, for example Left or Right, Leave or Remain. We now seek to specify the precise position of each party in political space.

There are a variety of ways of identifying where a party stands but here we focus on just one approach: we look at the views and actions of the party's supporters. This information can be obtained from opinion poll data. Each party has a Right score and a Remain score. I define these as follows.

The Right score for party X is: taking current supporters of party X, the proportion who voted Conservative in 2017 (as opposed to Labour). One might think of this score as the relative attractiveness of party X now for Conservative as opposed to Labour voters in 2017.

$$\text{Right score} = \% \text{Cons} / (\% \text{Cons} + \% \text{Lab})$$

The Remain score for party X is: taking current supporters of party X, the proportion who voted Remain in 2017 (as opposed to Leave).

$$\text{Remain score} = \% \text{Remain} / (\% \text{Remain} + \% \text{Leave})$$

Notice that both scores are proportions running from 0 to 1 (or, as percentages, from 0% to 100%).

I shall now present the results of using this approach. On Sunday 7th July 2019, *The Observer* reported the results of an Opinium survey.¹³ Opinium asked people:

“If there were a general election tomorrow, for which party would you vote?”

The data table for the survey broke people’s replies down by their past vote in the 2017 general election. Some (a certain percentage) had voted Conservative and some (a certain percentage) had voted Labour in 2017. This enabled me to calculate a Right score for each party, as described above.

| <u>Left</u> | <u>Right</u> |
|---|--------------|
| SNP 0; Lab 3; Green 15; PC 25; LibD 28; WV 45; TIG 50; All 51; DK 59; UKIP 71; Brexit 80; Cons 98 | |
| All: all the sample; WV, Would not Vote; DK Don’t Know. Small samples for small parties. | |

The data table also broke people’s replies down according to whether they voted Leave or Remain in the 2016 referendum. This enabled me to calculate a Remain score for each party, as described above.

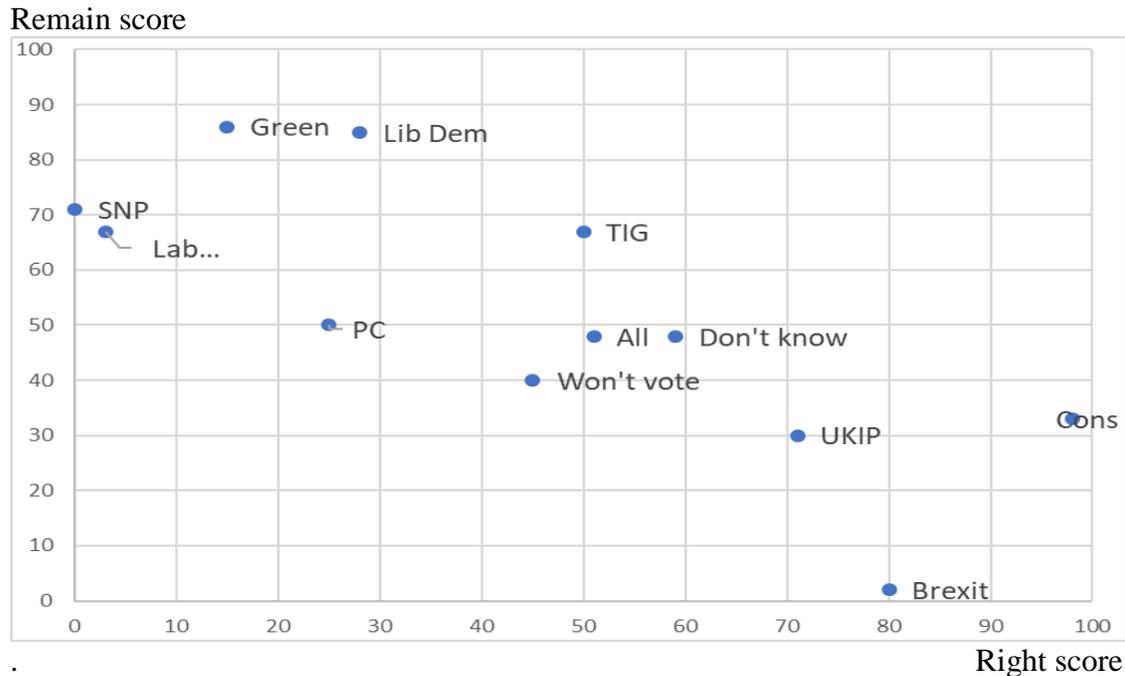
| <u>Leave</u> | <u>Remain</u> |
|---|---------------|
| Brex.P 2; UKIP 31; Cons 33; All 48; PC 49; Other 57; Lab 67; TIG 68; SNP 72; Lib Dem 84; Green 86 | |
| All: all the sample; Other: other parties. Small samples for small parties. | |

Thus each party has a location on the Left-Right dimension and a location on the Brexit Leave-Remain dimension. So each party can be represented by a point in two dimensional space. See Figure 2. There is a negative correlation – the more Right a party is, the less Remain it is – but the relationship is not exact.

Notice that the two main parties, Conservative and Labour, are at opposite extremes on the Left-Right dimension but are somewhat in the middle on the Leave-Remain dimension.

¹³ Savage, Michael. “Fears grow over risks of Johnson victory as Hunt challenge fades.” *The Observer*, July 7 2019: 6-7.
<https://www.opinium.co.uk/political-polling-3rd-july-2019/>;
<https://www.opinium.co.uk/wp-content/uploads/2019/07/Opinium-Political-Report-3rd-July-2019.pdf>.

Figure 2 The location of each party in a two-dimensional political space; Left-Right and Brexit Leave-Remain. Group A: bottom right; Group B: top left



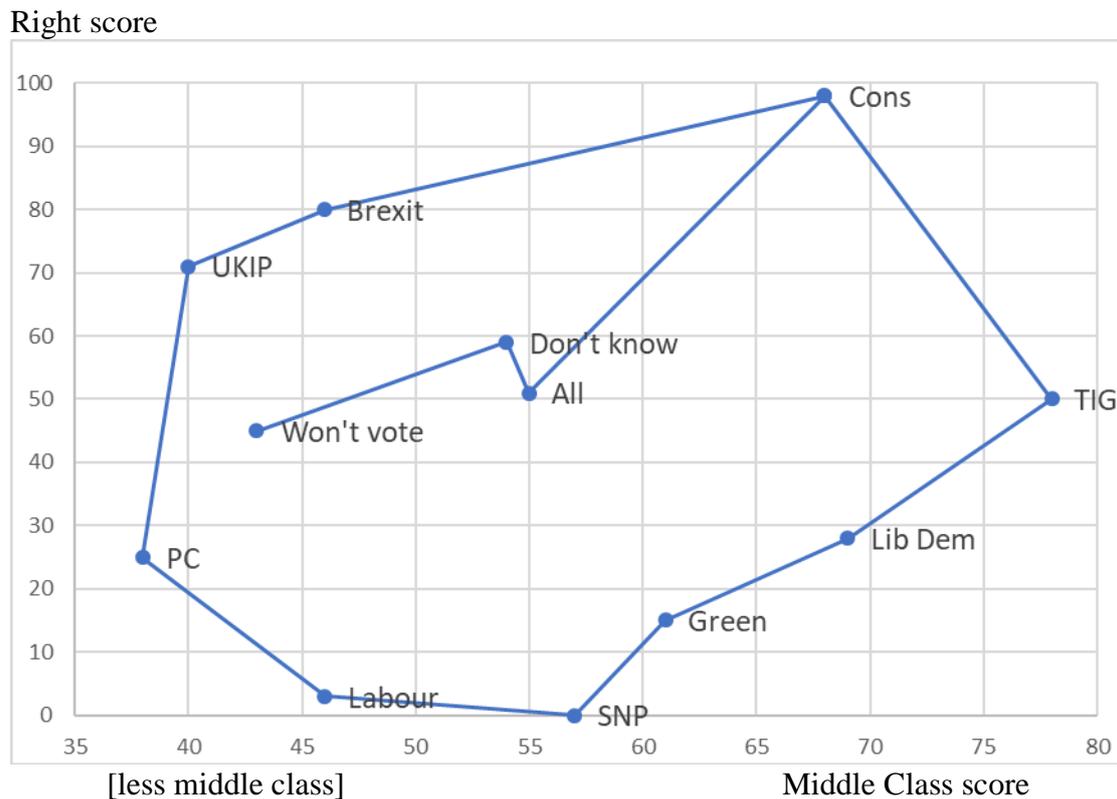
4.6 Class and politics

The working class are Labour and the middle class are Conservative. This relationship used to be very strong but has progressively weakened and is now quite weak.

The Opinium study used in the previous section also asked about social class. The data table broke replies down according to whether people were in either 'middle class' ABC1 or 'working class' C2DE. A Middle Class score is given by $(ABC1)/(ABC1+C2DE)$. Figure 2 locates each party on the Left-Right dimension and also on a class dimension.

The Middle Class scores for the parties lie between 35% and 80%. So there is no party that is totally working class or totally middle class. The parties lie on a loop round a centre point, All (all the sample). The Conservative party has a high Middle Class score and a high Right score (not surprisingly since the Right score might be regarded as a Conservative-leaning score). Labour is diagonally opposite Conservative. The loop displays two upward-sloping lines: UKIP, Brexit and Conservative (Group A); and PC, Labour, SNP, Green, Lib Dem and TIG (Group B). Thus there is a correlation between Middle Class and Right within each group. At the same time, for a given class, there is a split between Left and Right. This relates to the long-standing notion of working-class Conservatives ... and indeed to Marx's notion of false consciousness ... or nowadays different subjective identities.

Figure 3 The location of each party in a two-dimensional political space; Middle Class and Left-Right
 Group A: top left; Group B: bottom right.



4.7 Groups of parties

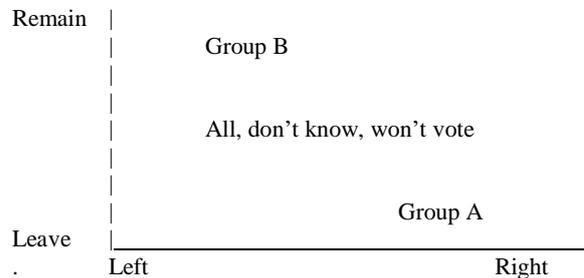
We shall be grouping political parties in two quite different ways. Firstly we shall group parties according to their *voting share*. There are two parties which have usually (but not always) been the two largest in terms of voting share, namely Conservative and Labour. So one way of grouping the parties is into *the two main parties* as one group and all *the other parties* as a second group. Note that this grouping is quite independent of political space.

The second way of grouping the parties is in terms of their position in political space. Let us put the political parties into two groupings. Group A consists of the Conservative Party, the Brexit Party and UKIP. Group B consists of the Labour Party, the Liberal Democratic Party, the Green Party, the Scottish National Party and Plaid Cymru. Group A is on the Right and is for Leave. Group B is on the Left and is for Remain (assuming the Labour party is moving in that direction). Figure 2 shows where the two groups are located in political space.

Which of Group A and Group B has greater support? ... which has the majority? Either Group A has more than 50% or Group B has more than 50% (ignoring 'other'). So the middle voter is either Left & Remain or Right & Leave.

The situation is rather different for parties. For Group A parties, Conservatives are nearer the middle than the Brexit Party on both dimensions. For Group B parties, Lib Dems are in the middle on the Left-Right dimension but at the extreme of the Leave-Remain dimension. Labour are towards the extreme on the Left-Right dimension but towards the middle of the Leave-Remain dimension.

Figure 4 The two party groups in two-dimensional political space



4.8 The distribution of voters in political space

In a previous section we located parties in political space. We now wish to consider the distribution of voters in political space. Ideally we would directly use information about the individuals. This was the approach in the Onward study discussed earlier. Here however we adopt an indirect approach which is not altogether satisfactory. We locate each individual at the point of their party and consider the support for that party to be the frequency of the distribution of voters at that point.¹⁴

The frequency distribution of voters on the Left-Right dimension is indicated in Figure 5. The frequency distribution of voters on the Leave-Remain dimension is indicated in Figure 6. Both distributions give a jagged appearance indicating locally more popular parties (locally in terms of the dimensions).

The cumulative frequency distribution of voters on the Left-Right dimension is indicated in Figure 7. The cumulative frequency distribution of voters on the Leave-Remain dimension is indicated in Figure 8. The cumulative distribution smoothes out some of the jaggedness. The Leave-Remain distribution is close to that of the uniform distribution $y=x$.

The middle voter (in terms of the median) is located at the 50% level of the cumulative frequency distribution. The middle voter is located in the interval occupied by the Lib Dem party on the Left-Right dimension, and is located in the interval occupied by the Labour party on the Leave-Remain dimension.

¹⁴ Savage, Michael. "Fears grow over risks of Johnson victory as Hunt challenge fades." *The Observer*, July 7 2019: 6-7.
[https://www.opinium.co.uk/political-polling-3rd-july-2019/;](https://www.opinium.co.uk/political-polling-3rd-july-2019/)
[https://www.opinium.co.uk/wp-content/uploads/2019/07/Opinium-Political-Report-3rd-July-2019.pdf.](https://www.opinium.co.uk/wp-content/uploads/2019/07/Opinium-Political-Report-3rd-July-2019.pdf)

Figure 5 The frequency distribution of voters on the Left-Right dimension (indirect approach)

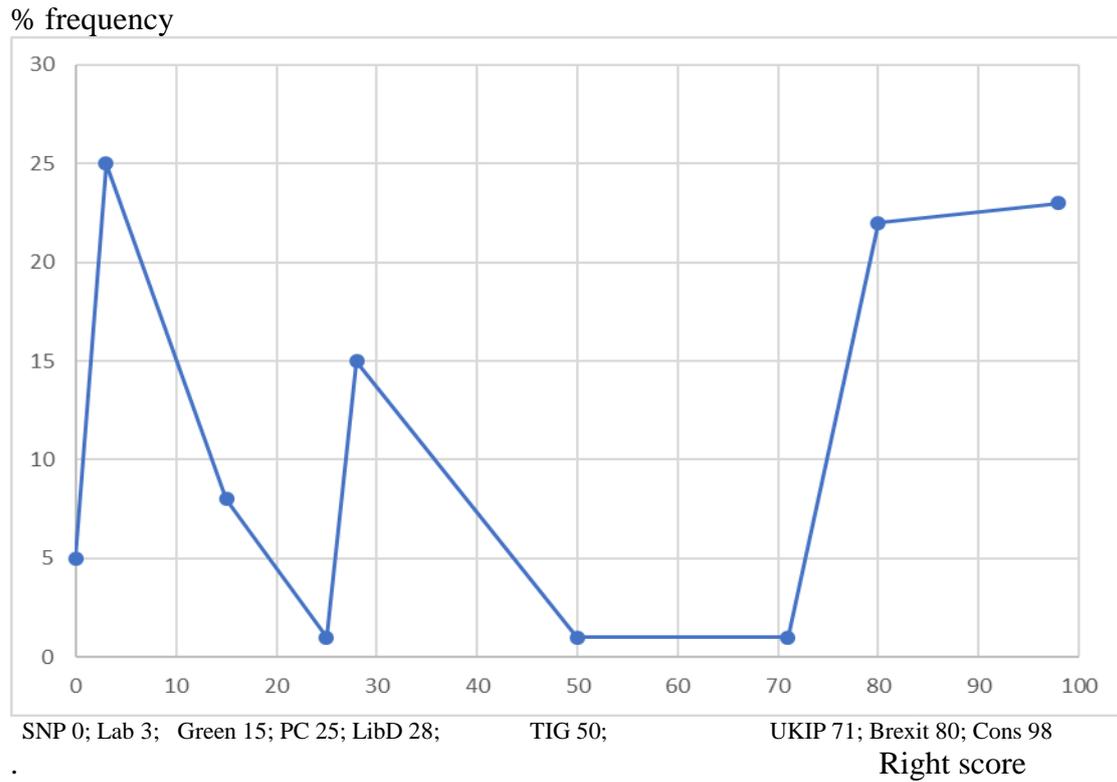


Figure 6 The frequency distribution of voters on the Leave-Remain dimension (indirect approach)

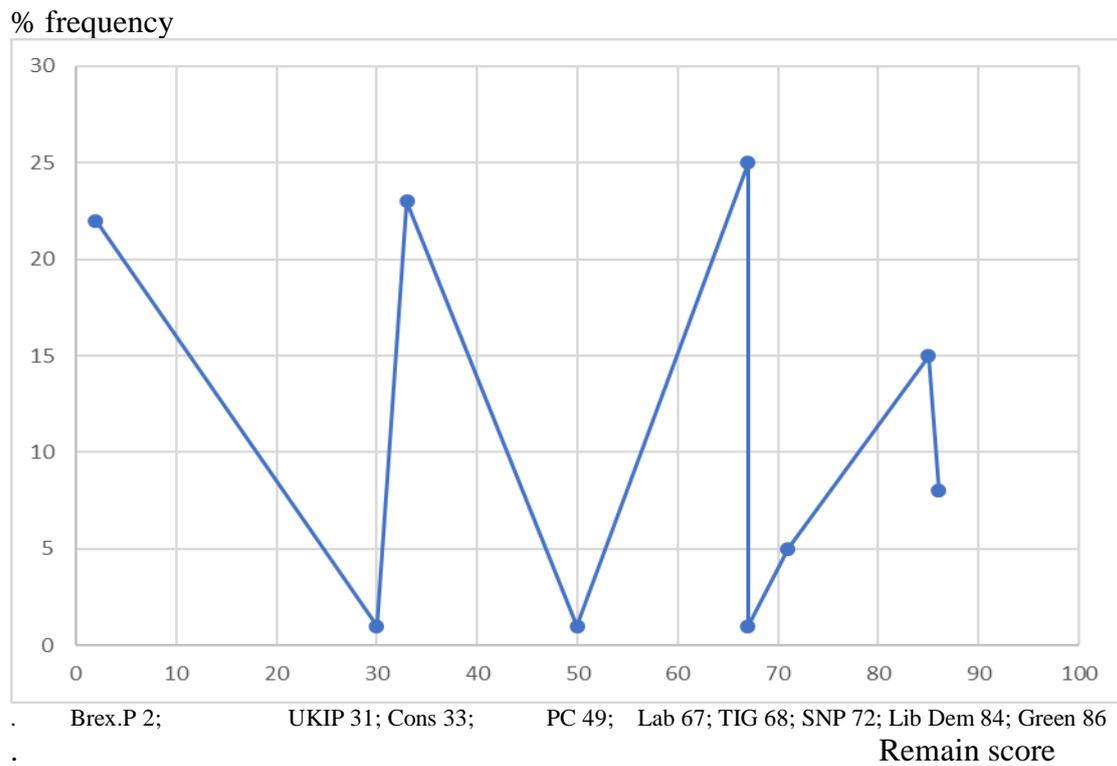


Figure 7 The cumulative frequency distribution of voters on the Left-Right dimension (indirect approach)

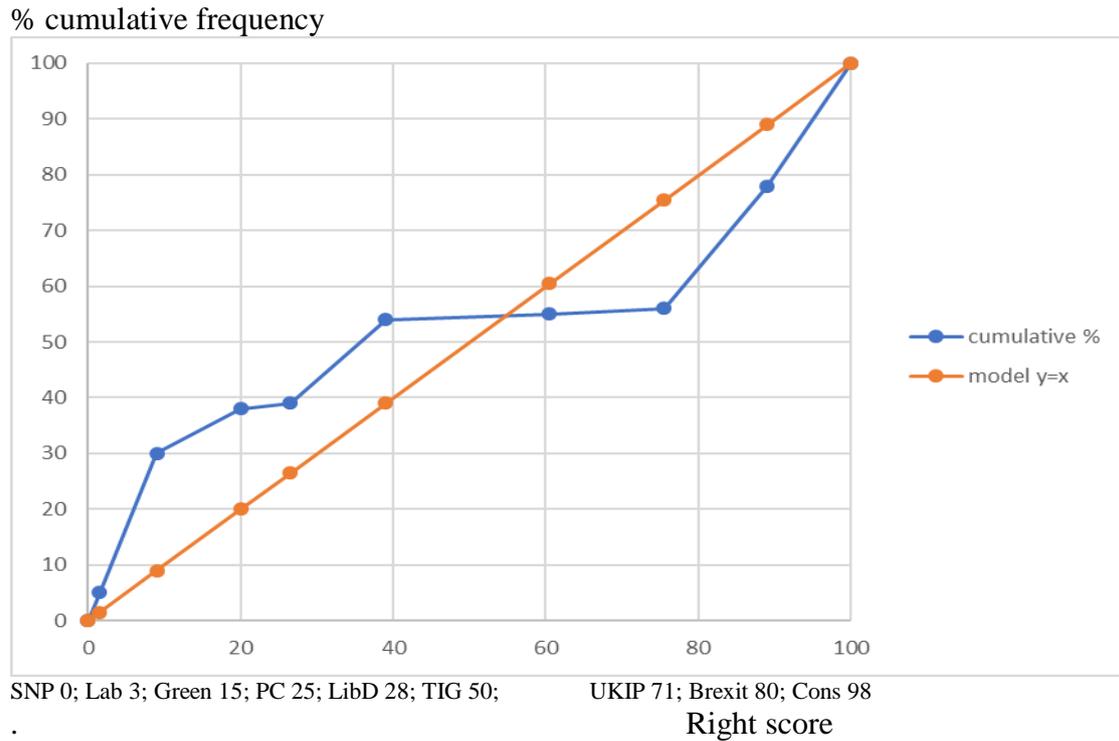
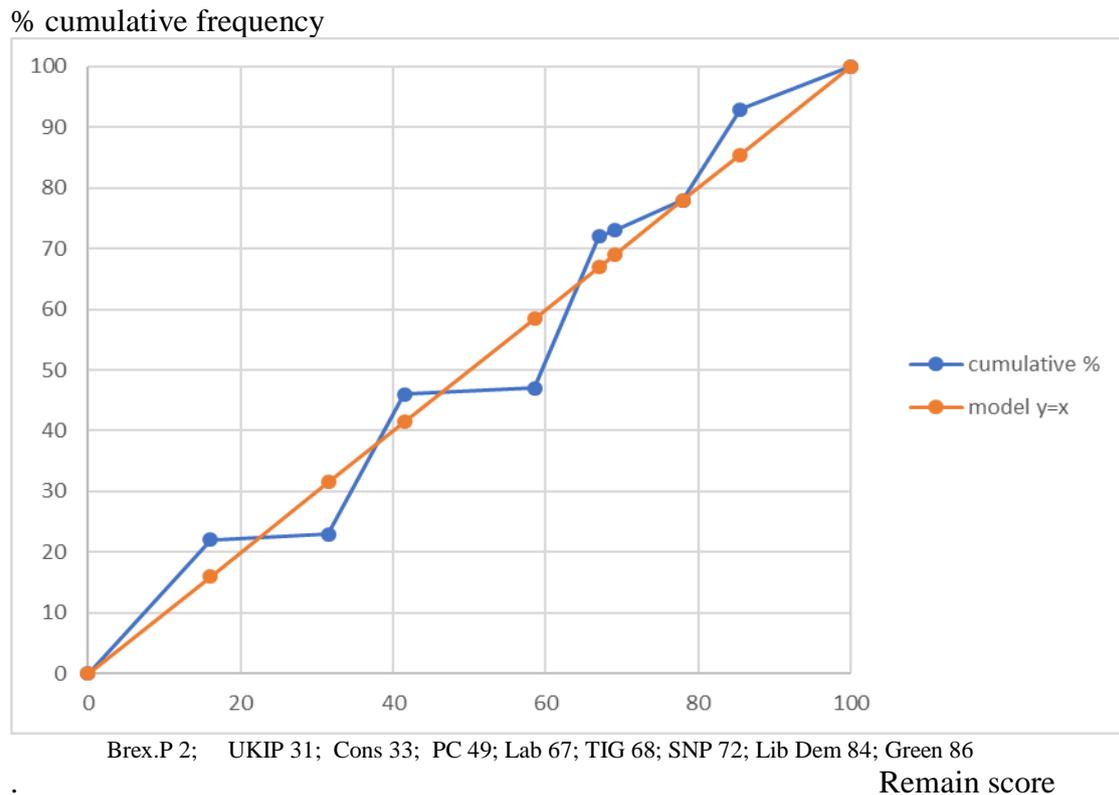


Figure 8 The cumulative frequency distribution of voters on the Leave-Remain dimension (indirect approach)



5 Time

The trajectory of UK politics since 1945 is discussed in the following:

Chapter 12 Time series: UK general elections - 1945 to 2015
Values, World Society & Modelling Yearbook, 2015

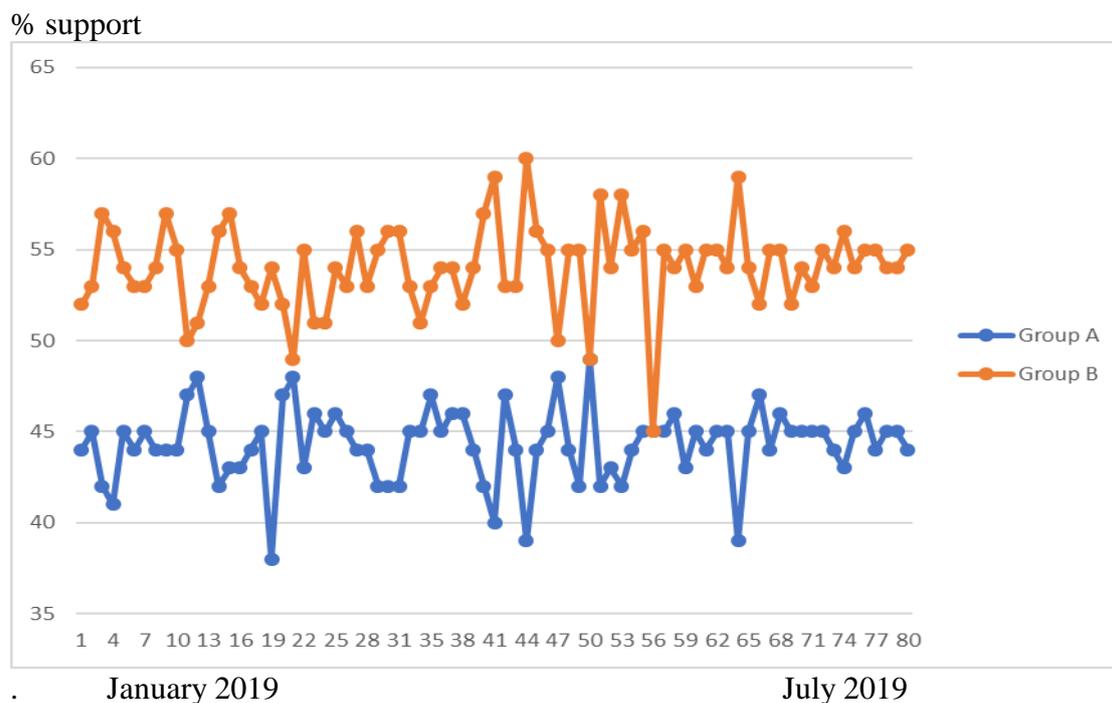
Chapter 4 UK, 2017: Mass and Gravity in Political Space
Values, World Society & Modelling Yearbook, 2017

5.1 The opinion trajectories for Brexit ... and for Groups A and B

The opinion trajectory for Brexit is remarkable. Despite all the arguing and the heartache – or perhaps because of it – opinions about Brexit have hardly changed in the last year or so (January 2018 to July 2019). A poll of polls shows Remain varying between 50% and 54%; and Leave varying between 50% and 46%. Recall that the 2016 referendum had Remain at 48% and Leave at 52%.¹⁵

We now consider the opinion polls for party support in the period January to July 2019 and derive the trajectories for Group A and Group B. Recalling that Group A is for Leave and Group B is for Remain, and given the stability of Brexit opinion noted above, it is perhaps not surprising that the A and B trajectories also show stability. In the period January to July 2019, the mean support has been 44.3% for A and 54.1% for Group B, with 1.6% for ‘other’. Group A is thus 10% below Group B. This level of support has remained fairly constant throughout the period, albeit with small fluctuations and occasional larger deviations. See Figure 9.

Figure 9 The level of support for Groups A and B, January to July 2019¹⁶



¹⁵ <https://whatukthinks.org/eu/opinion-polls/euref2-poll-of-polls/>

¹⁶ https://en.wikipedia.org/wiki/Opinion_polling_for_the_next_United_Kingdom_general_election

Group A: Conservative, Brexit, UKIP;
 Group B: Labour, LibDem, Green, SNP, PC, Change.

5.2 The EU elections in May, 2014 and 2019

A key event in 2019 was the EU elections. Table 3 presents the results. In 2019, Group A parties had 42.7% of the vote and 33 of the seats. Group B parties had 53.1% of the vote and 37 of the seats. Group A is thus 10.4% below Group B. This is close to the difference noted above. These aggregates were comprised of:

Group A: 30.7%, 8.8% and 3.2% of the vote; 29, 4 and 0 of the seats.

Group B: 19.8%, 13.7%, 11.8%, 3.5%, 1.0% and 3.3% of the vote; 16, 10, 7, 3, 1 and 0 of the seats.

I have not included Northern Ireland parties in my calculations. Northern Ireland has 3 seats.

The two main parties, Conservative and Labour, had just 22.5% of the vote and 14 of the seats. The other parties had 77.5% of the vote and 59 of the seats. Total seats equal 73.

In 2014, the results were different. In the European election, May 2014, the two main parties had 39% combined, 19% Conservative and 20% Labour. In comparison the 2019 results mark a slump in the vote of the two main parties of -16%, with -10% Conservative and -6% Labour.

Table 3 EU elections, UK, 2014 and 2019; percentage votes and seats (73 in total)¹⁷

| | 2019 | | 2014 | | change, 2014 to 2019 |
|------------------|-------------|--------|------------|-------|----------------------|
| | vote share. | seats. | vote Share | seats | |
| Brexit | 30.5 | 29 | - | - | +30.5 |
| Lib Dem | 19.6 | 16 | 6.6 | 1 | +13.0 |
| Labour | 13.7 | 10 | 24.4 | 20 | -10.7 |
| Greens | 11.8 | 7 | 6.9 | 3 | +4.2 |
| Cons | 8.8 | 4 | 23.1 | 19 | -14.3 |
| SNP | 3.5 | 3 | 2.4 | 2 | -1.1 |
| Plaid Cymru | 1.0 | 1 | 0.7 | 1 | +0.3 |
| Sinn Fein | 0.7 | 1 | 1.0 | 1 | +0.3 |
| DUP | 0.7 | 1 | 0.8 | 1 | -0.1 |
| Alliance | 0.6 | 1 | - | - | +0.6 |
| UUP | - | - | 0.5 | 1 | -0.5 |
| Change UK | 3.3 | 0 | - | - | +3.3 |
| UKIP | 3.2 | 0 | 26.6 | 24 | -23.4 |
| Various | | | | | |
| Group A | 42.5 | 33 | 49.7 | 43 | -7.0 |
| Group B | 52.9 | 37 | 41.0 | 27 | +11.9 |
| Two main parties | 22.5 | 14 | 47.5 | 39 | -25.0 |

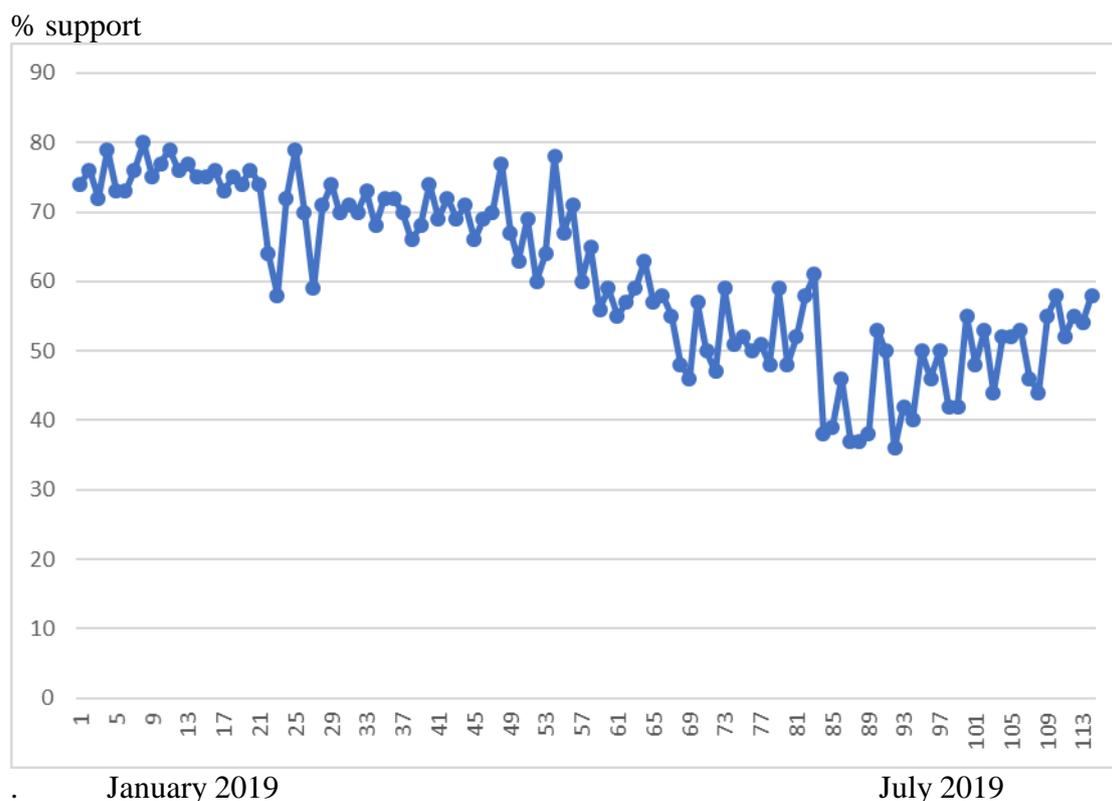
¹⁷ https://en.wikipedia.org/wiki/2019_European_Parliament_election_in_the_United_Kingdom;
https://en.wikipedia.org/wiki/2014_European_Parliament_election_in_the_United_Kingdom;

5.3 The opinion trajectory for the two main parties combined

Here we consider the support for the two main parties combined. The support for the other parties is simply the complement of this ($y\% = 100\% - x\%$).

Figure 10 shows the trajectory for January to July 2019. In the general election in June 2017 the two main parties, Conservative and Labour, gained a combined total of 82.4% of the vote. Opinion in 2019 started just below that level but fell steadily to reach a low of around 40% in May. Since that month it has risen steadily.

Figure 10 The support for the two main parties, Conservative and Labour, combined, January to July 2019.¹⁸



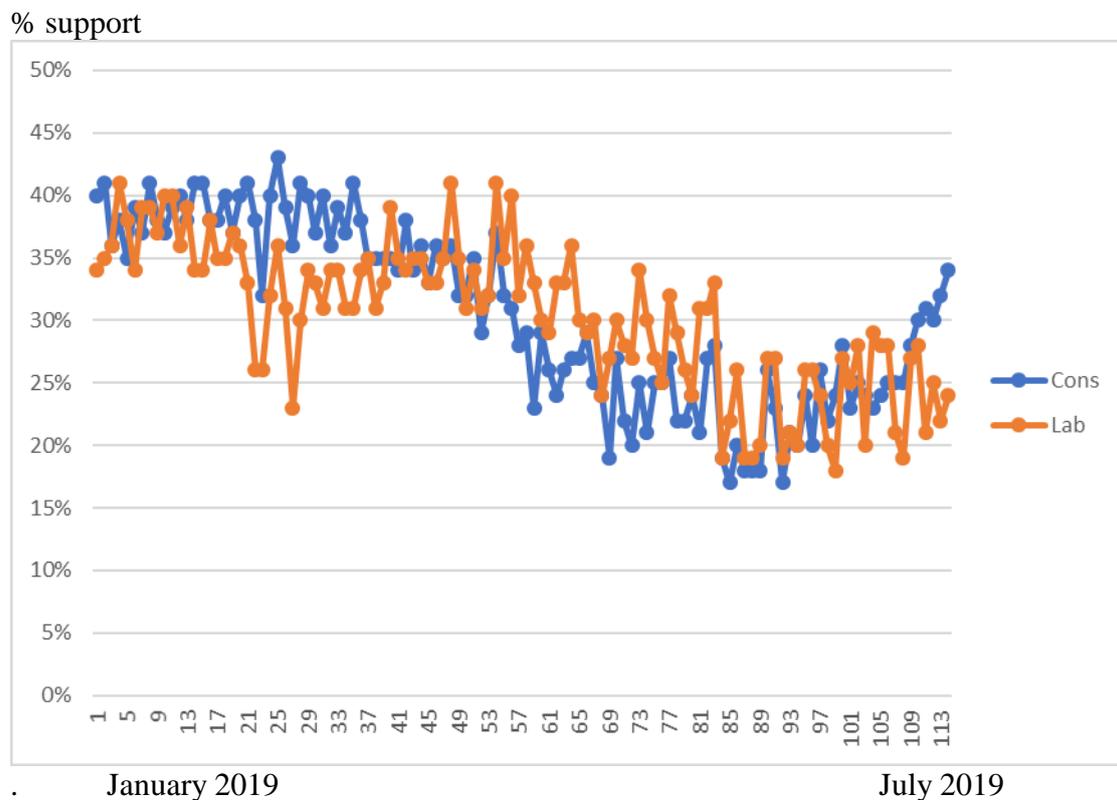
5.4 The opinion trajectory for the two main parties separately

We now consider the support for the two main parties separately. Figure 11 shows the trajectories for the two parties for January to July 2019. The Conservative trajectory is similar to that displayed in Figure 10: opinion in 2019 started at around 40% and stayed at that level for some time but then fell steadily to reach a low of around 20% in May. Since that month it has risen steadily. The initial decline reflects the increasing frustration that the government was not delivering Brexit. The current period of increase reflects starts with the prospect of a change in leadership of the party and the country and continues with the publicity attendant on the leadership contest and the final instalment of a new leader. The increase has accelerated with the instalment of the new leader – a Boris acceleration rather than a Boris bounce.

¹⁸ https://en.wikipedia.org/wiki/Opinion_polling_for_the_next_United_Kingdom_general_election

The Labour trajectory has a similar decline to that for the Conservative party reaching a low at the same time in May but has not shown any clear subsequent upward trend. Also the Labour trajectory shows more fluctuations both short term and medium term. There has been frustration with Labour's perceived lack of clarity in its Brexit stance and also concern about the issue of antisemitism.

Figure 11 The support for each of the two main parties, Conservative and Labour, January to July 2019¹⁹



The low point for both parties was first reached in April/May, around the time of the local elections and the European elections when the two main parties were deserted in favour of parties with either a strong Leave position or a strong Remain position.

Nigel Farage's Brexit Party was established in February 2019 and went on to be first in the European elections in May with 30.7% of the vote, drawing support mainly from the Conservative Party which had 9.8% of the vote. To win back voters from the Brexit Party the Conservative Party needs to deliver Brexit.

Over much the same period the Liberal Democrat party attracted increasing support and went on to be second in the European elections in May with 19.8% of the vote, drawing support mainly from the Labour Party which had 13.7% of the vote. To win back voters from the Lib Dems the Labour Party has been under pressure to shift its policy to a more pro-Remain stance.

Thus the EU elections in May 2019 constituted a turning point. What came before was a trend down to a trough or a trend up to a peak; and what came after was a trend

¹⁹ https://en.wikipedia.org/wiki/Opinion_polling_for_the_next_United_Kingdom_general_election

up from a trough or a trend down from a peak. It was a deep trough for the two main parties, Conservative and Labour; and a high peak for the newly formed Brexit Party (which came first in the EU elections) and the Liberal Democrats (which came second) while the Greens came ahead of the Conservatives. So, in terms of the Leave-Remain dimension, it was a trough for the two Brexit middle parties and a peak for the Brexit extreme parties. It is an example of what we shall now discuss: the Brexit middle losing to the two Brexit extremes.

5.5 The year 2019: the Brexit middle loses to the Brexit extremes

One way of describing the results in Figures 10 and 11 is to say that the two main parties lose votes to the smaller parties. However I think it is conceptually more powerful to note that the two main parties are in the middle of the Brexit continuum and to say that the Brexit middle loses to the two Brexit extremes – Conservative losing to the leave extreme and labour losing to the Remain extreme. Consider the following:

.(1) The general election of June 2017 and the polls in August 2019

In the general election in June 2017 the two main parties, Conservative and Labour, gained a combined total of 82.4% of the vote, 42.4% Conservative and 40.0% Labour.

In August 2019, the two main parties get 53% combined, 31% Conservative and 22% Labour.

Cons 31%; Labour 22%; Lib Dem 21%; Brexit 14%; Green 7%; SNP 4%; PC 0%; UKIP 0%; other 1%. YouGov poll 5-6 August 2019.

This is a slump in the vote of the two main parties of -29.4%, -11.4% Conservative and -18% Labour.

.(2) The European election, May 2019

The two main parties get 23% combined, 9% Conservative and 14% Labour.

In the European election, May 2014, the two main parties get 39% combined, 19% Conservative and 20% Labour. This is a slump in the vote of the two main parties of -16%, -10% Conservative and -6% Labour.

.(3) By-elections

Newport West:

The two main parties get 71% combined, 31% Conservative and 40% Labour; this is a slump in the vote of the two main parties of -21%, -8% Conservative and -13% Labour.

Peterborough:

The two main parties get 52% combined, 21% Conservative and 31% Labour; this is a slump in the vote of the two main parties of -42%, -25% Conservative and -17% Labour.

Brecon and Radnorshire:

The two main parties get 66% combined, 49% Conservative and 18% Labour; this is

a slump in the vote of the two main parties of -22%, -10% Conservative and -12% Labour.

(4) Prime Minister May in parliament

Prime Minister May's deal was to some extent in the Brexit middle. Parliament voted it down due to a combination of Remainers and Rees-Mogg hard Brexiteers.

(5) Prime Minister Johnson in parliament

Prime Minister Johnson may produce a revised version of Mrs May's deal, again to some extent in the Brexit middle. It is possible that Parliament will vote it down due to Remainers and, if the deal is not hard enough, hard Tory Brexiteers.

(5) Conservative leadership election

The Conservative leadership election involved a bidding competition for the votes of the hard Brexit party members ... and for the support of defectors to the Brexit Party.

We now come to a case which displays a different pattern. Only one of the main parties has a significant slump and only one of the minor parties has a gain. It is better understood in terms of the Left-Right dimension. The current government is at one extreme of the Left-Right dimension and loses votes to the party in the middle of the Left-Right dimension. Local elections are more concerned with cuts to local services thus relating to the Left-Right dimension.

(6) Local elections

The Conservatives suffered badly in the local elections, losing 1330 councillors, 27% of their total ... whereas Labour had just a modest decline, losing 4%. The beneficiaries, albeit from a much smaller base, were Lib Dems and Independents, both doubling their councillors, and also the Greens, tripling their (previously small number of) councillors. Paradoxically, UKIP had a massive fall, losing 82% of their (very small number of) councillors. The UKIP presence in the 2015 local election had not been strong and much of their support has now swung to Nigel Farage's new Brexit Party – the Brexit Party having little or no presence in these particular elections.²⁰

5.6 By-elections: Peterborough ... Brecon and Radnorshire ... pacts and tactical voting

Discussions between Liberal Democrats, Greens and the Change party to form a pact for the Peterborough by-election on June 6th failed to reach agreement and Labour won the seat.²¹

²⁰ The Times

Local election results 2019: 4 May 2019, 12-13.

Wikipedia

https://en.wikipedia.org/wiki/2019_United_Kingdom_local_elections

BBC

<https://www.bbc.co.uk/news/topics/ceeqy0e9894t/england-local-elections-2019>

<https://www.bbc.co.uk/news/uk-politics-48091592>

John Curtice

<https://www.bbc.co.uk/news/uk-politics-48132541>

²¹ See pages 12-17 in:

In August, for the Brecon and Radnorshire by-election, there was a pact between LibDem, Plaid Cymru and the Greens, the latter two not fielding candidates. The LibDems won the seat from the Conservatives, 43% to 39%. The Conservative vote had fallen by 10% - and the Brexit plus UKIP vote had increased by 10%. The Labour vote had fallen by 12%; the Greens did not stand having previously gained 3% of the vote; and the Lib Dem vote had increased by 14%.

In contrast to these large movements between individual parties there was hardly any movement between the two groups, A and B. Party group B ‘won’ in 2017 by just 20 votes! Party group A won in 2019.

We now consider Middle Voter Democracy. As we noted earlier the middle voter (median) is always in a party in the winning group, A or B. So in 2017 the middle voter was ‘in’ a party in winning Group B; and, looking at the results in the table below, they were ‘in’ the Lib Dem on the Left-Right dimension and Labour on the Leave-Remain dimension. In 2019 the middle voter was ‘in’ a party in winning Group A; and, looking at the results in the table below, they were ‘in’ the Conservatives.

The actual results, using the majority criterion, were the opposite to this. The actual results were Conservatives in 2017 and Lib Dems in 2019.

Table 4 Brecon and Radnorshire, 2017 general election and 2019 by-election²²

| | 2017 | 2019 | change | |
|--------------------------|----------------|-------------------------|--------|---|
| Cons | 48.6 | 39.0 | -10 | |
| LibDem | 29.1 | 43.5 | +14 | |
| Lab | 17.7 | 5.3 | -12 | |
| PC | 3.1 | - | -3 | |
| UKIP | 1.4 | 0.8 | 0 | |
| Brexit | - | 10.5 | +10 | |
| Other | 0 | 1.0 | +1 | |
| Green | - | - | - | |
| Group A | 50.0* | 50.3 | +0.3 | *20,657 |
| Group B | 50.0* | 48.8 | -1.2 | *20,677 |
| middle voter (median) | Group B mix | Group A Conservative | | mix: Lib Dem on Right; and Labour on Remain |

Group A: Conservative, Brexit, UKIP;
Group B: Labour, LibDem, Green, SNP, PC, Change.

What effect do pacts and tactical voting have? The LibDem pact with PC and the Greens may have contributed to their win - but, on a superficial analysis, the PC and the Greens had a combined total of 3.1% (3.1+0) in 2017 and this would not have been sufficient to boost the Lib Dems from 29.1 in 2017 to 43.5 in 2019.

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo1OTkxMml4MzI0Zjc0Nzk>

²² [https://en.wikipedia.org/wiki/Brecon_and_Radnorshire_\(UK_Parliament_constituency\)](https://en.wikipedia.org/wiki/Brecon_and_Radnorshire_(UK_Parliament_constituency))
<https://www.bbc.co.uk/news/uk-wales-politics-49200636>

Much more substantial was tactical voting: the apparent switch of 12% from Labour to Lib Dem and that on its own would have taken the LibDems to 41.1, thus defeating the Conservatives on 39.

If the Conservatives had had a pact with the Brexit Party then arguably they would have gained an extra 10% giving them 49% and a comfortable win. This point was not lost on the Telegraph:

“By-election shows we need Leave coalition.”

“Split of Brexit supporters at Brecon means Leavers must vote tactically.”

“It’s time to reach out to the Brexit Party.”

“The Tories need to do a deal with the Brexit Party. Unless they get us out of the EU by October 31, it’s the only way for the Conservatives to survive.”²³

6 Extremes and factions ... Middle Voter Democracy

6.1 The problem of factions

Mrs May warned against the idea that “mobilising your own faction is more important than bringing others with you ...”²⁴

At rallies and at hustings ... on social media and in traditional media ... simple symbols are used to create hatred and to mobilise opinion so that a faction can win ... can win against other factions and against society as a whole.

Trump seeks a second term in office and his strategy is to exacerbate the polarisation of the two major parties. Johnson and Hunt have likewise outbid one another in the exacerbation of the polarisation between Remainers and Leavers. Likewise Brexit Party exacerbation of the polarisation between the UK and the EU.

In her last major speech as PM, delivered at Chatham House, May argued for compromise etc. – see above quotation. Factions and parties seek to win for their own faction. This was a topic discussed in a course I was involved with thirty years ago ... Back in the 1980s, the UK Open University produced a course on *Models of Democracy*. The set book had the same title and was written by the late David Held.²⁵ Factions and parties form to promote their own interests, against other factions and against society as a whole. Factions and parties seek to win. They gain power for their

²³ Editorial. *Daily Telegraph*, August 3, 2019: 21.

Letters. *Daily Telegraph*, August 3, 2019: 21.

Letters. *Sunday Telegraph*, August 4, 2019: 17.

Richard Tice. *Sunday Telegraph*, August 4, 2019: 17.

²⁴ “Stay out of the gutter, Mrs May tells frontrunner.”

Francis Elliott. *The Times*, July 18, 2009: 7.

<https://www.chathamhouse.org/file/theresa-may-state-politics>

<https://www.gov.uk/government/speeches/pm-speech-on-the-state-of-politics>

However the speech has been criticised along the following lines:

<https://www.express.co.uk/news/uk/1155101/theresa-may-brexit-news-no-deal-eu-michel-barnier-bbc-tory-leadership-video>

... but I think the arguments in the speech have merit in their own right.

²⁵ *Models of Democracy*. David Held. 1987 Cambridge: Polity Press

https://en.wikipedia.org/wiki/David_Held; <https://www.sup.org/books/title/?id=10597> 3rd edition, 2006

faction or party in part by obtaining majorities. The notions of faction, party and majority are thus interlinked but interestingly are differently referenced in the index in Held's book.²⁶ Held's discussion of *the problem of factions* examines James Maddison's Federalist Paper No. 10 in a way which is highly relevant to current debates in the US and the UK ...

[to be continued]

The problem of factions relates to what I have referred to as the majority problem: Brexit and the majority problem: competing democratic criteria (121 pages).²⁷

6.2 Middle Voter Democracy

There are many different conceptions of democracy. Middle Voter Democracy is a set of ideas which provides a different way of looking at political choice:

People and parties, options and policies are located in a political space. Their distribution in political space tells us what we need to know. The (MVD) best option is defined as the option preferred by the middle voter. Elections or opinion polls provide evidence about voters' distribution in political space. The evidence allows us to estimate the middle voter and hence the (MVD) best option.

Parties and pacts, aggregate options and majority criteria introduce partiality and can sometimes lead to indecisiveness or to the choice of options which are not the (MVD) best option.

What would have happened if MVD had been used?

The 2016 referendum would have pointed to a very soft Brexit as the (MVD) best option.

Mrs May's Deal would have been approved by parliament at the first vote. A softer Brexit would have been approved by parliament's indicative votes. Boris Johnson would not have been selected as the new Tory party leader. Conservatives would have won the Brecon and Radnorshire by-election in 2019 ...
... Labour/ Lib Dem having won the seat in 2017 by 20 votes!

6.3 Against binary options and majority voting ... the work of Peter Emerson

Middle Voter Democracy is influenced by some of the ideas which have long been energetically proposed by Peter Emerson. Emerson's case against binary options and majority voting is I think a valid one. A book launch for his latest book will take place

²⁶ Factions 63, 187-8, 189-190, 61-66, 190-1

Majorities 190, 193-4

Parties 154, 155-8 175 216-9 258

²⁷

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDoyOWFiNmU0MzNiMjZTEw>

at the annual conference of the Conflict Research Society in September at the University of Sussex.

*Majority Voting as a Catalyst of Populism*²⁸

“This timely book presents a critique of binary majority rule and provides insights into why, in many instances, the outcome of a two-option ballot does not accurately reflect the will of the people. Based on the author's first-hand experience, majority-voting is argued to be a catalyst of populism and its divisive outcomes have prompted countless disputes throughout Europe and Asia. In like manner, simple majority rule is seen as a cause of conflict in war zones, and of dysfunction in so-called stable democracies. In order to safeguard democracy, an all-party power-sharing approach is proposed, which would make populism less attractive to voters and governments alike. In geographically arranged chapters, well-tested alternative voting procedures (e. g. non-majoritarian Modified Borda Count) are presented in case studies of Northern Ireland, Central Europe, the Balkans, the Caucasus, Russia, China, North Korea and Mongolia.”

7 My Brexit website

<https://sites.google.com/site/gordonburmathsocsci/central>

Brexit: the impact on UK politics

Brexit: the VFSD model (Value Function Spatial Distribution)

Brexit and the majority problem: competing democratic criteria

Brexit background 2007-2017 ... UK politics; Ireland politics

Optimal social design

Brexit: the impact on UK politics (62 pages, fifth draft)

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo1OTkxMmI4MzI0Zjc0Nzk>

Brexit: the VFSD model (20 pages)

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo3MmUzYTcxY2YzZGEwMWI1>

Brexit and the majority problem: competing democratic criteria (121 pages)

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDoyOWFiNmU0MzNiMjkZTEEx>

Brexit referendum 2016

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbmxb3Jkb25idXJ0bWF0aHNvY3NjaXxneDoyNDQ3ZmQwODFjNmViZjkx>

Brexit background 2007-2017 ... UK politics; Ireland politics (11 Chapters)

<https://sites.google.com/site/gordonburmathsocsci/World-Society-Programme/uk-politics-ireland-politics>

Brexit: the VFSD model

(Value Function Spatial Distribution)

1 Surface percentages and underlying reality

²⁸ <https://www.springer.com/gb/book/9783030202187>

- 2 Two opposing sides
 - 2.1 Remain or Leave?
 - 2.2 The VFSD model for two options
- 3 In the middle
 - 3.1 Mrs May's Deal ... December 2018
 - 3.2 The VFSD model for three options
- 4 Two middles
 - 4.1 Mrs May's Deal or a softer Brexit, March 2019
 - 4.2 The VFSD model for four options
- 5 Locating the parties in two-dimensional political space

6 Optimal social design_

“Optimal social design: estimating a social welfare function from questionnaire data”
Gordon Burt, *Quality and Quantity*, 2006, 40, 6, 897-910.

<https://link.springer.com/article/10.1007/s11135-005-3266-8>

“Social design, ethics and the amount of value”

Chapter 6 in Gordon Burt's *Conflict, Complexity and Mathematical Social Science*,
Bingley, Emerald Press, 2010, pp. 87-105, particularly pp. 95-105.

<https://www.researchgate.net/publication/291366513> Chapter 6 Social design ethics and the amount of value