The Middle Opinion. USA 2020.

Chapter 10 (pre-election draft)[1]

Middle parties and the M-shaped distribution in political space

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Overview. This chapter is about the strength of parties in the middle of political space and about the distribution of strength amongst all parties.

Section 1. The first section in the chapter looks at some of the discussion in the UK about empowering the centre ground in the face of populist extremists. In extreme times, middle voters yearn for middle parties. Existing middle parties may show resurgence and new middle parties may form. However the resurgence may collapse and the new parties may die. The middle may not be strong enough to counter the power on either side. A similar experience may occur for extreme parties. What may be left is the continuing power of two 'mid-extreme' parties. The result is that the voting distribution is M-shaped.

Section 2. The rest of the chapter looks at the distribution of political values, a foundational concept. We start with some general remarks about distributions. A simple classification of distributions is based on the number of peaks in the distribution (one, two or many) and the location of the peaks (middle or endpoint, left or right).

Here we are interested in the distribution of political preferences as expressed by the percentage support for political parties. Two types of distribution are considered. The first type is the distribution of percentages when the party percentages are ordered by decreasing size. The 2019 presidential election in Tunisia is used as a case study.

The second type of distribution concerns how individuals and parties are distributed <u>in political space</u>. We consider cases in five different countries: Portugal, Poland, Austria, Israel, and the UK. The Austria and Israel case studies are given an extended treatment. The presence of an M-shaped distribution is noted. Whereas these first four case studies consider only a one-dimensional Left-Right political space, the UK case study consider two-dimensional space: a Left-Right dimension and a Leave-Remain dimension.

Although we have used the phrase 'political preferences' the findings can also be thought of as relating to political identities and to the distribution of political identities.

1 The centre ground and the extremes of the political spectrum

A number of pieces appeared last week discussing the middle and the extremes of the political spectrum, and also extreme political discourse.[2]

Daniel Finkelstein was at the Cheltenham Festival talking about his book, *Everything in Moderation*.

In *The Times*, Max Hastings talked about "those millions of us who go through life believing that truth about most things in life is to be sought in the middle … we want a political party we can support without shame and a revival of reasoned argument … where and how can the militant centre fight back? … [the Lib Dems] are bereft trapped in a vicious circle … I doubt that a new centre party can emerge in the foreseeable future. We must pin our hopes on voices of moderation in the two main groupings … ". In addition to this argument about the political spectrum, Max Hastings also discusses the need for respect and the quality of debate.

In reply, Matthew Goodwin is in broad agreement with Max Hasting's desire to "curb rising polarisation in British society". Yet he is "not convinced that the restoration of the old liberal centre ground, which he craves, is the answer". He argues that, with the rise of populism, Brexit and Boris Johnson, opinion has moved away from social and economic liberalism to family, security, community, stability and tradition.

Also replying to Max Hastings, Anthony Seldon, "an instinctive middle-grounder myself" takes the long view, going back to Ancient Greece and Rome, the wars of the

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[2] *Everything in Moderation*, Daniel Finkelstein
      Podcast with Tim Bale
      https://podcasts.google.com/feed/aHR0cHM6Ly9hbmNob3IuZm0vcy8yMTcwNDQ4NC9wb2RjYXN0L3Jzcw==
      Cheltenham Festival
      https://www.cheltenhamfestivals.com/literature/whats-on/2020-/danny-finkelstein-everything-in-moderation/ ;
      Book: https://www.harpercollins.co.uk/9780008356606/everything-in-moderation/
"How to help our politicians raise their game. To rescue both big parties from extremism, we must revive respect for MPs and curb social media."
      Max Hastings, *The Times*, October 1, 2020: 26.
"Moderating and improving public discourse"
      Matthew Goodwin, Anthony Seldon, Gerard Connolly, David Bogod,
      Letters to *The Times*, October 2, 2020: 26.
National Populism: The Revolt Against Liberal Democracy. Matthew Goodwin
      LSE podcast 2018 https://www.lse.ac.uk/lse-player?id=4532 (3.36…)

Roses, the Civil War and the 19th and 20th centuries, noting that "gladiatorial contests heighten not dampen interest in debate". Vituperative debate is not a new phenomenon.

Gerard Connolly shares Max Hastings' regret at the loss of moderate thinking in politics. "Boris Johnson has succeeded where Jeremy Corbyn failed and turned his party into a narrow-minded cult. … [He has excluded and weakened alternative voices] … *The Washington Post* talks of 'the right-wing nationalist government of Boris Johnson.'"

David Bogod shares Max Hastings' desire "to moderate the incontinent abuse displayed by many on social media". However he stresses that "measures need to be proportionate and should minimally impact on freedom of speech".

Hastings talks about different wings of a party. Connolly talks about leaders turning "a party into a narrow-minded cult". Parties, wings, cults are different types of groupings of individuals, in other words, factions. A key aspect of these groupings is whether they are narrow or broad.

Goodwin refers to "the Overton window (the ideas that define the spectrum of acceptable policies)" …

Connolly refers to the lack of tolerance shown *by* the Johnson government: exiling those who disagree, marginalising, politicising, briefing against, evisceration and refusal to be scrutinised … "all strikes at the heart of democracy".

But how much tolerance is shown *towards* the Johnson government? Hastings says "I used to regard the Conservative right as awful, but unthreatening because ridiculous. Yet today they are in charge." Looking in the other direction, he calls for Jeremy Corbyn's expulsion and for ensuring that "the left-wing snake is scotched". The middle can exhibit a lack of tolerance of the extremes.

Hastings asks "where and how can the militant centre fight back?" …

… There is an idea here which I am struggling to formulate. Hastings wants his ideas to win. People are dissatisfied with democracy if they don't win. They almost think that democracy fails if they don't get what they (or their group) want. Democracy is …
[I need to think about this some more!]

I too have been influenced by recent issues such as Brexit[3] and the 2019 UK general election[4] to think about the centre ground. Taking as a starting point the abstract

[3] The Brexit Year, 2019.
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0b3AtaHNvY3NjaXxneDo0YTQzMDUzNDkzMDI0ZTg1
[4] UK election 2019
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0b3AtaHNvY3NjaXxneDo2ODlmNDRhY2UzZjgwMjI4
UK 2019 election results
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0b3AtaHNvY3NjaXxneDo2NjBmMDhkN2NkNWI5Y2E3
Labour leadership election, 2020; voter distribution in political space

notion of the distribution of opinions in abstract political space[5], the following general points seem to me to be important.

.(0) The centre can be defined either in relation to a space of objective attributes or to the distribution of public opinion in that space.
.(1) The foundational concept is the statistical distribution representing the variation of individuals in the space.
.(2) In certain circumstances the middle estimate gives the best estimate of the true value.
.(3) In certain circumstances the middle gives the optimal social choice.[6]
.(4) The distribution of individuals in space is sometimes single-peaked (as in the normal distribution).
.(5) The party vote distribution is sometimes M-shaped with the central party having a low percentage of votes.[7]
.(6) The social value of different parties/governments can also be M-shaped.[8]
The latter three points are relevant to Hastings' concern that a middle party gets trapped in a vicious circle.
.(7) The assumption of a one-dimensional space makes sense in that a principal component can always be identified.
.(8) However complications arise when two or more dimensions are in play and are significant.
.(9) In particular parties may be central on one dimensions but not on the other.[9]
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDozNDc2ODE1NjA4YzQ1ODgw
.(10) The distribution of individuals and the location of parties can change over time.
These points relate to Goodwin's comments on Hastings.

The above points are discussed in greater detail in a number of recent papers. What follows are summaries of the key arguments in these papers.

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https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDozNDc2ODE1NjA4YzQ1ODgw
[5] The USA racism protests … the abstract structure of public opinion. See pages 34-65.
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDozMjI1MWMMxYTRlZmIyYmJm
[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
The majority problem and central optimality.
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo0ZWFmZmViNTBlYmJiNGI4
[7] Voter distribution in political space: Tunisia, Austria, Israel, Portugal, Poland, UK
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo1ZWRmM2M5MGFjN2Q0NWZi
[8] Page 225 in Burt, Gordon. *Values, World Society and Modelling Yearbook, 2015*. Newcastle: Cambridge Scholars, 2017.
[9] Page 6 onwards in Labour leadership election, 2020; voter distribution in political space
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDozNDc2ODE1NjA4YzQ1ODgw
Pages 20-23 in The Brexit Year 2019:
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0bWF0aHNvY3NjaXxneDo0YTQzMDUzNDkzMDI0ZTg1

The problem of factions[10]

> Mrs May warned against the idea that "mobilising your own faction is more important than bringing others with you …"[11]

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.[12] 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 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.[13] 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).[14]

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[10] Pages 34-35 in The Brexit Year 2019:
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0wF0aHNvY3NjaXxneDo0YTQzMDUzNDkzMDI0ZTg1

[11] "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.

[12] *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

[13] Factions   63, 187-8, 189-190, 61-66, 190-1
Majorities   190, 193-4
Parties   154, 155-8 175 216-9 258

[14]
https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxnb3Jkb25idXJ0wF0aHNvY3NjaXxneDoyOWFiNmU0MzNiMjhkZTEx

2 Distributions

The concept of a distribution is central in the study of statistics. There is a very sophisticated classification of types of distribution. Here however we introduce only a simple classification according to the number of peaks in the distribution (one, two or many) and the location of the peaks (middle or endpoint, left or right):

  single peaked, middle peak
  single peaked, endpoint peak (increasing or decreasing)
  double peaked, U-shaped, two endpoint peaks
  double peaked, left endpoint peak and middle peak
  double peaked, middle peak and right endpoint peak
  double peaked, M-shaped, two middle peaks
  multi-peaked

Statisticians are particularly interested in measures of central tendency ('middle') and spread. Sometimes peaks are in the middle and sometimes not.

2.1 Distribution ordered by size

Sometimes we are interested in the distribution when items are put in order of decreasing size. Because we order items in this way, the distribution is necessarily peaked on the left, and indeed single-peaked on the left unless the second (and possibly further items) is of the same size.

There are several broad types of distribution, depending on the character of the decrease. In the following, k is the decrease from one number to the next; and r is the rate of decrease from one item to the next:

constant	k=0	r=1
constant decrease	k<0	
constant rate of decrease, the geometric distribution		$0 \leq r \leq 1$
variable rate of decrease		
stepwise descent		
mixtures of types …		
… stepwise descent approximating constant rate of decrease		
approximation to type		

Maths:
Given a sequence $\{x_i\} = \{x_0, x_1, x_2 \ldots x_n\}$, $k_{i+1} = x_{i+1} - x_i$ and $r_{i+1} = x_{i+1}/x_i$; $i = 0,1,2 \ldots n..$ Let $a = x_0$. In an infinite geometric series with sum Σ, $\Sigma = a/(1-r)$. If the sum is $\Sigma = 100\% = 1$, then $a = (1-r)$. So $(a+r) = 1$.

Tunisia 2019

Here we consider the distribution of percentages when the party percentages are ordered by decreasing size. The case study here is particularly useful in that it illustrates what can happen when there are many contestants.

The Tunisia presidential election had its first round on 15 September 2019 and second round on 13 October 2019. There were 26 contestants in the first round, with a runoff between the top two in the second round. The winner, Kaïs Saïed, *Independent*, had 18% in the first round and then 73% in the second round. Nabil Karoui, *Heart of Tunisia*, had 16% in the first round and then 27% in the second round.
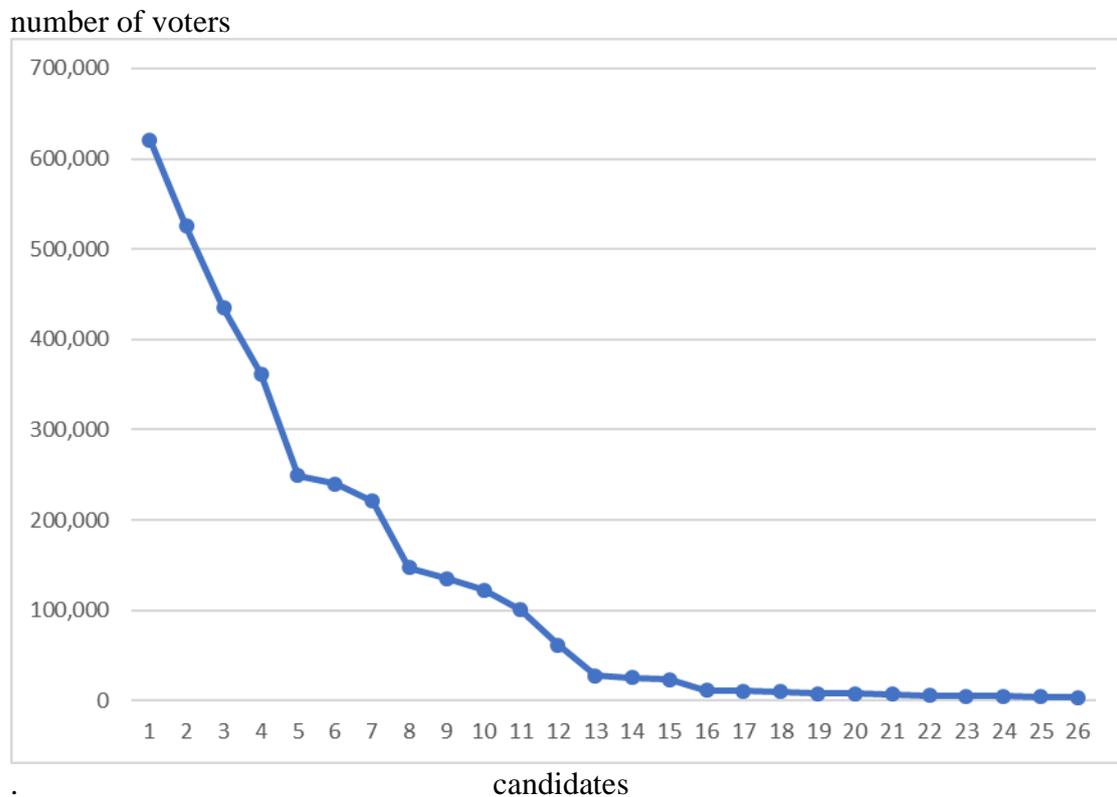https://en.wikipedia.org/wiki/2019_Tunisian_presidential_election

Figure 1 shows the distribution ordered by size for the first round. Figure 2 shows the rate of decrease from one item to the next. The rate fluctuates about the mean value of r=0.830, reflecting the type of distribution: *stepwise descent, approximating constant rate of decrease*.
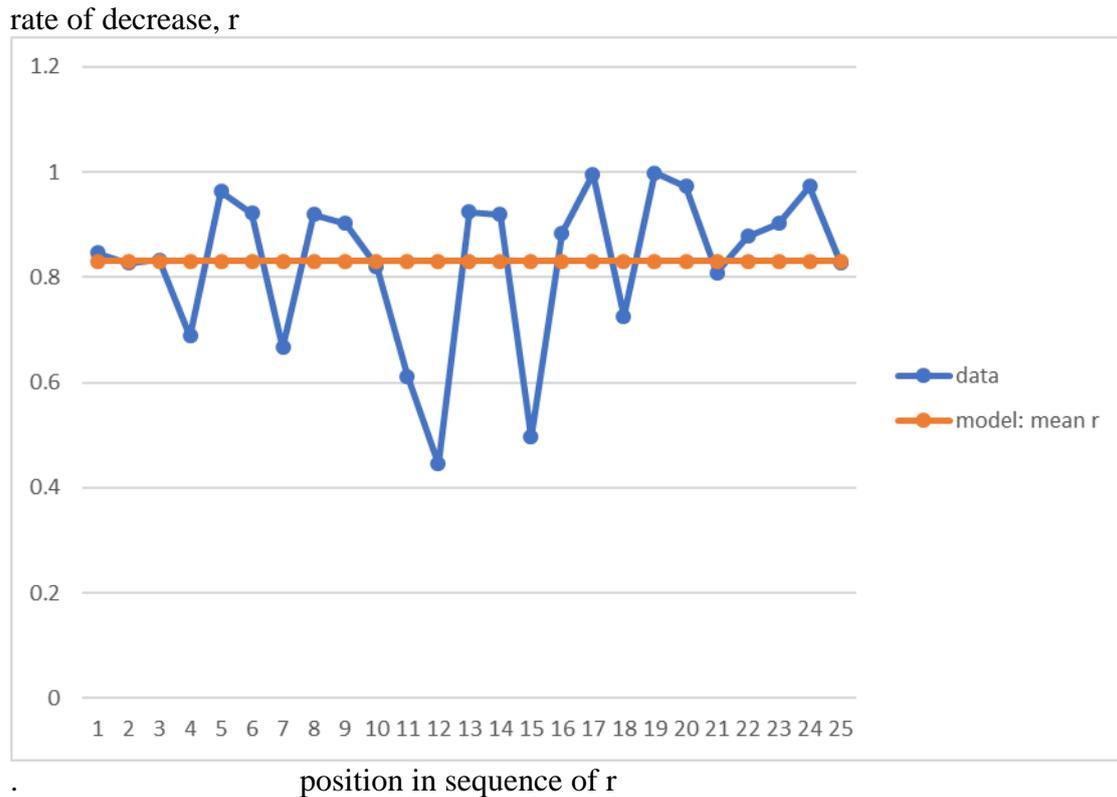
Maths:
The mean rate is r=0.830. The first (highest number) is 0.184 (18.4%). So (a+r)=1.014, which is close to the theoretical value of 1 in the case of the infinite geometric series

Figure 1 Tunisia: the distribution of candidates' votes for the first round, ordered by size. Number of voters.

number of voters

.   candidates

Figure 2 Tunisia: the distribution of candidates' votes for the first round, ordered by size. The rate of decrease from one item to the next.

rate of decrease, r

.   position in sequence of r

2.2 The distribution of individuals and parties in political space: the M-distribution

We now consider the distribution of individuals and parties in political space. A common type of distribution has a single central peak. However what we find in the cases we look at is that party distributions in political space are M-shaped.

Recent elections in Austria and Israel, and recent polling in the UK, provide examples of the M-distribution. The percentages gained by the five parties in the Austrian election exhibit an M-shaped distribution when the parties are ordered along the Left-Right dimension – see Figure 1 below. There are two dominant parties separated by a squeezed middle party and each of the dominant parties has a smaller party on its extreme. A more elaborated version of the same pattern occurs in the Israeli election – see Figure 4 below. The UK situation is similar with Conservative and Labour being the two dominant parties and Liberal Democrats being the squeezed middle and with the Brexit Party on the extreme right and the Greens arguably on the extreme left – this pattern becoming more complicated with the salience of a second Brexit dimension. See Figures 7 and 8.

How might the M-distribution change from one election to the next? Overall it might become deeper or shallower. The change distribution would then be M-shaped or W-shaped. This pattern might be less apparent if there are more local changes between adjacent parties. The other change is that the M-shape may become more or less symmetrical as a result of shifts from one dominant party to the other, to the left or to the right.

How might the M-distribution have evolved? Evolution might have occurred through coalescing and extinction of many small parties or through fracturing and creation of one or a few parties. One notional path of evolution starts with just one party. A second party forms and a dynamics familiar to theorists takes place as both parties converge to the ideal position of the median voter. This gives space for a party to form at each of the two extremes. The two original parties retain dominance but move towards their respective extremes, allowing a centrist party to find support in the middle.

The M-distribution for party votes is in contrast with the shape for the distribution of the opinions of individuals, which a recent study shows to be the normal distribution. It might be said that parties distort the distribution of opinion in society …

Cases of distributions in political space

We now consider cases of distributions in political space in five different countries: Austria, Israel, Portugal, Poland and the UK. The Austria and Israel case studies give an extended treatment whereas the Portugal and Poland case studies give only a basic analysis. Whereas these first four case studies consider only a one-dimensional Left-right political space, the UK case study consider two-dimensional space: a Left-Right dimension and a Leave-Remain dimension.

Portugal 2019

Elections were held in Portugal on 6th October 2019.

Table 4 lists the parties in Portugal from Left (top) to Right (bottom). The first column gives the percentage vote. The second column gives the seats gained. The third column gives the change in seats from the previous election.[15]

Figure 8 presents the frequency distribution for the number of seats (see the second column in Table 1 above). The frequency distribution is M-shaped. However were it

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[15] Note: no seats were gained or lost by the Communist Party (0.7%) nor by the anti-capitalist party Der Wandel (0.5%); nor by the Austrian Beer party (0.1%).
Previous election: 15th October 2019
Sources: The Times (see above);
https://en.wikipedia.org/wiki/2019_Austrian_legislative_election
https://wahl19.bmi.gv.at/
https://en.wikipedia.org/wiki/2017_Austrian_legislative_election
https://en.wikipedia.org/wiki/2013_Austrian_legislative_election

not for the one seat won by the Liberal Initiative party the distribution would be single-peaked.

Table 4 Votes and seats, Portugal general election, October 2019

	% votes	seats	change in seats
Unitary Democratic Coalition	6	12	- 5
People-Animals-Nature	3	4	+ 3
Left Bloc	10	19	0
LIVRE	1	1	+ 1
Socialist	37	106	+20
Liberal Initiative	1	1	-
Social Democratic	28	77	-12
People's	4	5	-13
Enough	1	1	-
		230	

Figure 8 The M-shaped distribution of the number of seats, Portugal 2019

number of seats
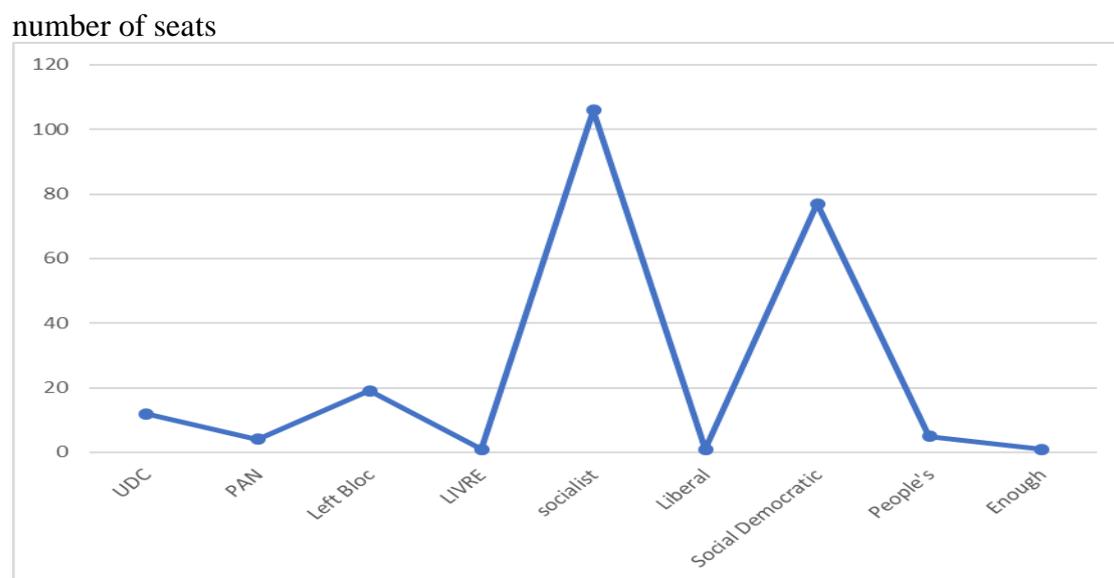
Poland 2019

Elections were held in Poland on 13th October 2019 for both the Sejm (lower house) and the Senate.

Table 5 lists the parties from Left (top) to Right (bottom). The results for the Sejm are given in the first three columns: the first column gives the percentage vote; the second column gives the seats gained; and the third column gives the change in seats from the previous election.[16] The final column gives the seats in the Senate.

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[16] Note: no seats were gained or lost by the Communist Party (0.7%) nor by the anti-capitalist party Der Wandel (0.5%); nor by the Austrian Beer party (0.1%).
Previous election: 15th October 2019

Table 5 Poland: votes and seats, general election, 13 October 2019

| | Sejm (lower house) …………………………… | | | | Senate |
	votes	seats	change in seats		seats
The Left (SLD)	13	49	+49		2
German Minority (MN)	0.2	1	0		0
Civic Coalition (KO)	27	134	-32		43
Polish Coalition (PSL)	9	30	+14		3
Law and Justice (PiS)	44	235	0		48
Confederation (KWIN)	7	11	+ 6		0
Other		0	-37	Independents	4
		460			100

Figure 9 presents the frequency distribution for the number of seats in the Sejm (see the second column in Table 1 above). The frequency distribution is roughly M-shaped. Strictly speaking there are three peaks but the third peak (The Left) is the lowest peak and is a peak only as a consequence of the placing of the German Minority, 1 and 0 seats, respectively.

Figure 9 Poland Sejm and Senate: the M-shaped distribution of the number of seats, 2019

number of seats

Distribution analysis: the election in Austria, 2019

Elections were held in Austria on 29th September 2019. The headlines tend to highlight 'the winners' and 'the losers':

> "Infighting grips far right after Austrian poll defeat."
> Moody, Oliver. *The Times*, October 1, 2019: 36.

But the detailed results report the percentages of votes for each party. The new seating in parliament is illustrated with the parties ordered along one dimension (usually from Left to Right).

This distribution of percentages along the dimension is a fundamental representation of the opinions of all the people. Distribution analysis involves looking at the shape of the distribution, looking at the properties of the distribution, and at the cumulative distribution, and paying particular attention to measures of central tendency, such as the mean, median and mode; and measures of spread such as standard deviation, and polarisation.

Table 1 lists the parties in Austria from Left (top) to Right (bottom). The first column gives the percentage vote. The second column gives the seats gained. The third column gives the change in seats from the previous election.[17]

Table 1 Votes and seats, Austria general election, 29th September 2019

.	votes	seats	change in seats
JETZT	1.9	0	-8
Greens	13.8	26	+26
Social Democrat	21.2	40	-12
NEOS [econ. Lib]	8.1	15	+5
People's Party	37.5	71	+9
Freedom Party	16.2	31	-20
		183	

Figure 3 presents the frequency distribution for the number of seats (see the second column in Table 1 above). The frequency distribution is M-shaped.

Figure 4 again presents the frequency distribution but now includes the cumulative distribution. The cumulative distribution for the results is close to the cumulative

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[17] Note: no seats were gained or lost by the Communist Party (0.7%) nor by the anti-capitalist party Der Wandel (0.5%); nor by the Austrian Beer party (0.1%).
Previous election: 15th October 2019
Sources: The Times (see above);
https://en.wikipedia.org/wiki/2019_Austrian_legislative_election
https://wahl19.bmi.gv.at/
https://en.wikipedia.org/wiki/2017_Austrian_legislative_election
https://en.wikipedia.org/wiki/2013_Austrian_legislative_election

distribution for a uniform distribution. The figure also presents the median seat line. With 183 seats the median seat is 92. The median seat occurs in the People's Party: it occurs on the left-wing of the party. The People's Party runs from the 82nd seat to the 152nd seat. The median seat occurs 10/71 (0.14) across the range for the People's Party.

Figure 3 The M-shaped distribution of the number of seats, Austria 2019
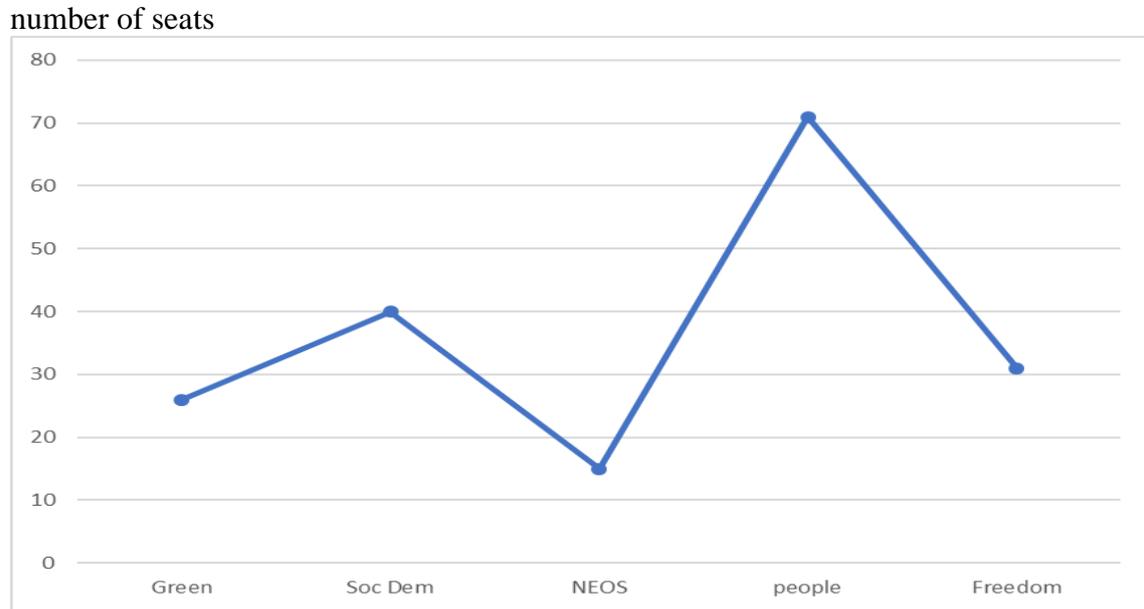
number of seats

Figure 4 Number of seats; frequency, cumulative and median line (92)

number of seats
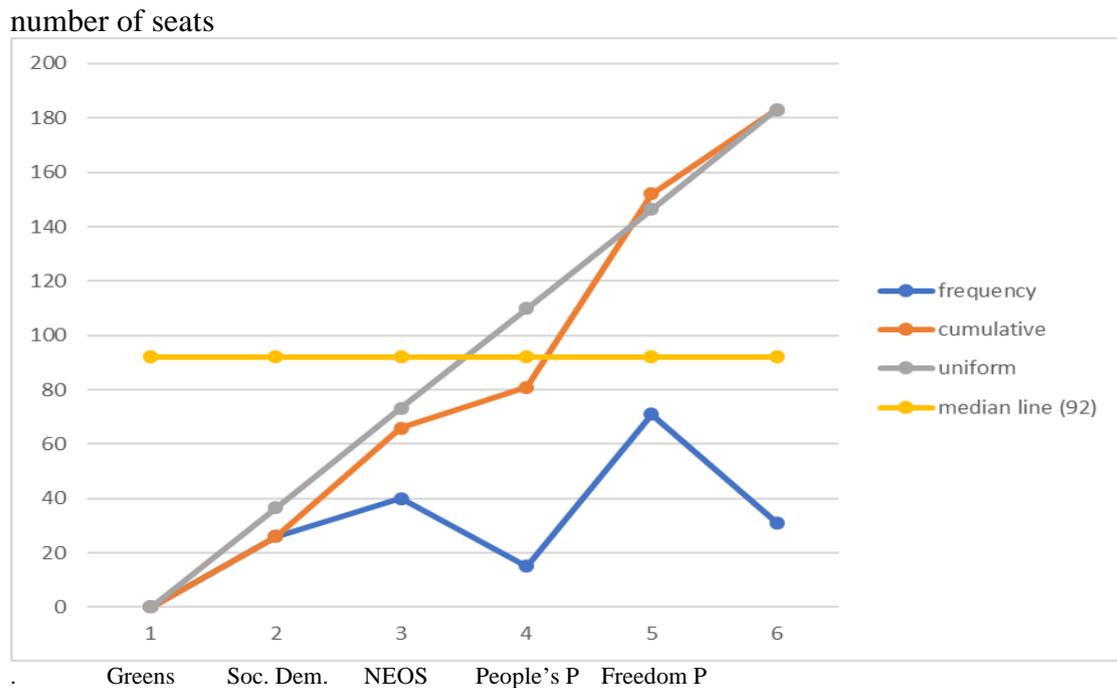
We now suppose that each party has a numerical position along the continuum which we take to be the unit interval, [0,1]. The mean position is 0.56 using Points A; or 0.54 using Points B.
Points A: 0, 0.25, 0.5, 0.75, 1.
Points B: 0.1, 0.3, 0.5, 0.7, 0.9.

**Table 2** The middle of the distribution

Median seat	92
Median party	People's party
Position in median party	0.14 in party range
Mean position	0.56 (Points A); or 0.54 (Points B)

We now consider the change in the number of seats from 2013 to 2017 to 2019. The frequency distribution is M-shaped in each of these three years. Figure 5 presents the frequency distribution for the number of seats and the distribution for the change in the number of seats, 2013-7 and 2017-9 (see the second and third columns in the table above).

Overall the change distribution, 2017 to 2019, slopes down from left to right indicating a shift to the left. At a more detailed level the change distribution is UV-shaped: the dominant left party losing seats to the extreme Greens (giving a U shape) and the extreme right losing votes to the dominant right (giving a V shape). The change distribution, 2013 to 2017, slopes down from right to left indicating a shift to the right.

Figure 5 The M-shaped distribution of the number of seats; the change distribution

number of seats
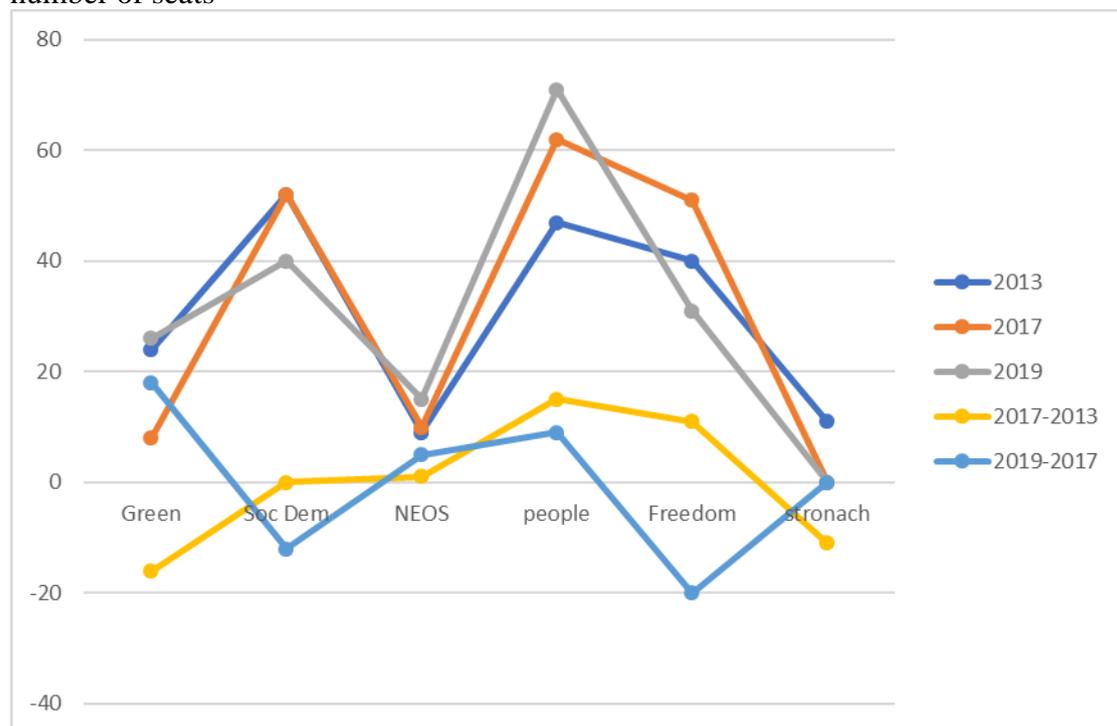
Israel's election majority problem, Autumn 2019

Recently, since Autumn 2019

December 11th 2019
Knesset set to dissolve at midnight.
https://www.timesofisrael.com/barring-11th-hour-breakthrough-knesset-set-to-dissolve-at-midnight/

March 2nd 2020
A further election was held on 2nd March 2020. Percentage votes:

Table 3 Votes, Israel general elections, September 2019 and March 2020

|	votes sept 2019	2020	2020-2019
Israeli Arab Joint List	10.5	12.7	+2.2
Labour-Gesher…	4.8	5.8	+1.0
Democratic Union	4.3	-	-4.3
Blue and White	25.9	26.6	+0.7
Yisrael Beitenu	7.0	5.7	-1.3
Likud	25.1	29.5	+4.4
Yamin	5.9	5.2	-0.7
[Ultra-orthodox:	[13.6]	[13.7]	[+0.1]
Shas	7.5	7.7	+0.2
UTJ	6.1	6.0	-0.1

https://en.wikipedia.org/wiki/September_2019_Israeli_legislative_election;
https://en.wikipedia.org/wiki/2020_Israeli_legislative_election;
https://en.wikipedia.org/wiki/Democratic_Union_(Israel).

Figure 6 The M-shaped distribution of the percentage of votes, Israel, Sept 2019 and 2020

number of seats
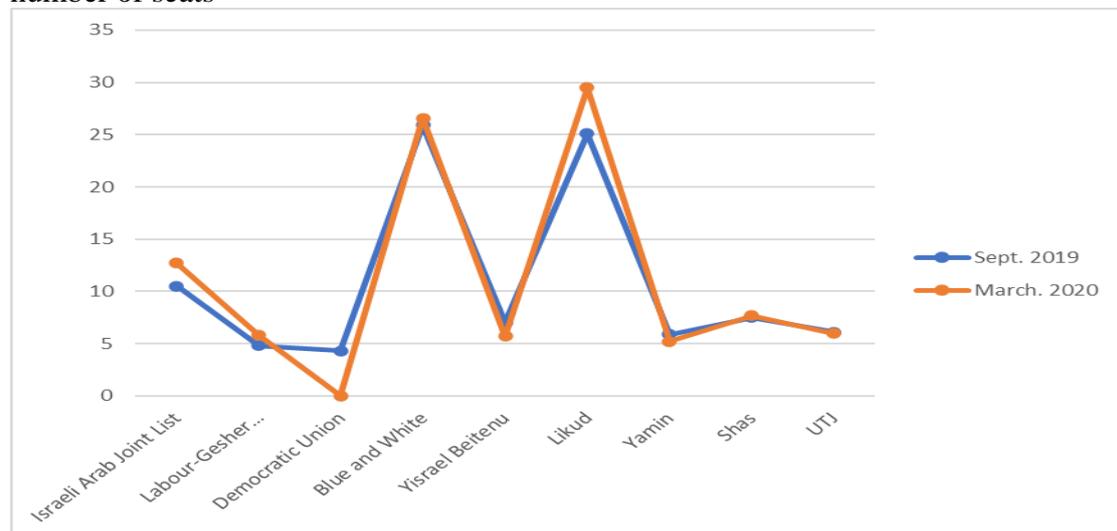
<u>Earlier, Autumn 2019</u>

September 24th 2019
"With no proper coalition since 2018, Israeli governance is lost in transition."
Raphael Ahren. *The Times of Israel*, September 24, 2019.
https://www.timesofisrael.com/topic/2019-israeli-elections/

A month later:
"President Reuven Rivlin will task Blue and White party leader Benny Gantz with forming a government on Wednesday, after Prime Minister Benjamin Netanyahu announced earlier this week he was unable to do so.
A statement from Rivlin's office on Tuesday said the president will officially give Gantz the mandate to try and build a Knesset majority after his chief of staff completed a second round of consultations with representatives of all Knesset parties. The two will sign a document establishing the appointment at 8 p.m. and make statements."
TOI Staff. *The Times of Israel*, October 22, 2019.
https://www.timesofisrael.com/gantz-to-be-tasked-with-forming-government-at-official-ceremony-wednesday/

The recent election in Israel has resulted in no majority for any one party or indeed for the previous right-wing bloc. Mr Netanyahu of Likud is not able to establish a right-wing government. Avigdor Lieberman of Yisrael Beiteinu has called for a 'liberal' unity government including Likud and Blue & White. Mr Netanyahu has suggested to Mr Gantz of Blue & White that they should set up a unity government. But Mr Netanyahu's call was dismissed by Mr Gantz within hours. The former military chief read out a statement saying,

"Blue and White, headed by me, has won the election" and "We will not be dictated to". "In order to form a unity government, we must not come with political blocs and spinning, but rather with honesty, patriotism, responsibility and seriousness," he added. "I am interested in and intend to form a broad and liberal unity government, under my leadership. A government that will convey the will of the people."
https://www.bbc.co.uk/news/world-middle-east-49753221

President Reuven Rivlin said he had heard "loud and clear the voices calling for a broad and stable national unity government" and praised the prime minister for "joining that call". Mr Rivlin will hold consultations with party representatives before nominating a candidate whom he believes has the best chance of forming a government.

It is worth pausing to reflect on the words used and the underlying ideas. One set of ideas indicate *all of the people and the whole of society* 'the will of the people', '[national] unity government', and 'broad'. Another set of ideas indicate *subgroups of society*: 'liberal' and 'right-wing'. Another set of ideas indicate *relationships, power and competition*: 'headed by me, has won the election" and "We will not be dictated to" … to *coalitions*: 'political blocs' … *contrast of values*: 'not … spinning, but rather with honesty, patriotism, responsibility and seriousness'. Finally is the idea of stability: 'stable', 'best chances of forming a government'. Table 3 presents the election results.

Table 3 Votes and seats, Israel general election, September 2019

.	votes	seats	change in seats
Israeli Arab Joint List	10.5	13	+3
Labour-Gesher	4.8	6	0
Democratic Union	4.3	5	+1
Blue and White	25.9	33	-2
Yisrael Beitenu	7.0	8	+3
Likud	25.1	31	-7
Yamin	5.9	7	+1
[Ultra-orthodox:	[13.6]	[17]	[+1]
Shas	7.5	9	+1
UTJ	6.1	8	0
Total		120	

https://en.wikipedia.org/wiki/September_2019_Israeli_legislative_election

Figure 6 presents the frequency distribution for the number of seats (see the second column in Table 1 above). The frequency distribution is M-shaped – but with a smattering of seats at both extremes.

Figure 6 The M-shaped distribution of the number of seats, Israel 2019

number of seats
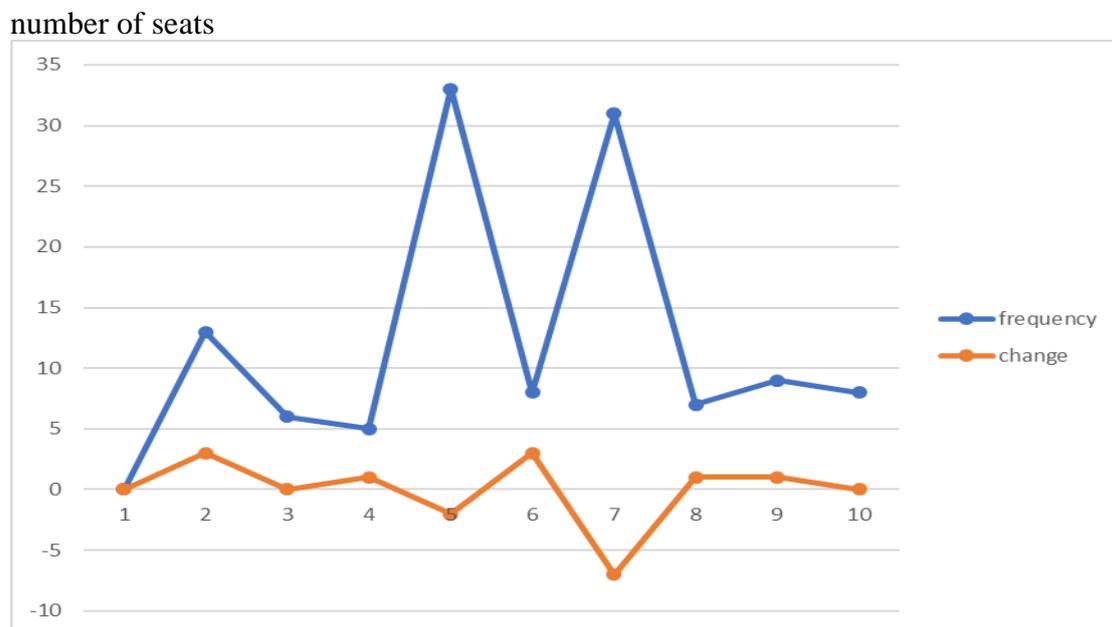
How might a majority government be formed? There are 120 MPs. The halfway borderline is 60 MPs. At least 61 MPs are needed to achieve an overall majority.

One party. No one party comes anywhere close to this - the party with most MPs, Blue & White, has just 33 MPs.

Two parties. There is only one coalition of two parties which has an overall majority: Blue & White and Likud combined gives 64 MPs, just 4 MPs above the 60 borderline. This coalition has been proposed by Likud but rejected by Blue & White.

Three parties. Clearly any coalition of three parties which included both Blue & White and Likud would give an overall majority. Yisrael Beitenu has proposed that it be the third party in such a coalition. In contrast there are no three parties that could form an overall majority unless it included the two largest parties.

Four parties. There are some coalitions possible which include only one of the two largest parties that could form an overall majority. For example 33+13+9+8=63.

A key feature of the 33+13+9+8=63 coalition is that it involves parties from across the whole spectrum. This is a positive feature in terms of representing the whole spectrum but it is difficult to achieve because parties like to join with other parties close to them. For example the voting system allows 'surplus vote agreements' and these were signed by Democratic Union and Labour-Gesher; Blue & White and Yisrael Beitenu; Yamina and Yikud; and UTJ and Shas. Note that these agreements are all between adjacent parties in the ordering listed in Table 1 above.

We now consider coalitions of adjacent parties of minimal size. There are three.

Left-centre	13+6+5+33+8	= 65	Gantz, Blue & White
Left-centre-right	33+8+31	= 70	Lieberman, Yisrael Beitenu
Centre-right	8+31+7+9+8	= 63	Netanyahu, Likud

Each of the three is most naturally associated with a 'natural' leader and party. Which of the three will it be? President Rivlin has asked Mr Netanyahu to try to build a coalition … but did he contemplate asking Mr Lieberman?
https://www.timesofisrael.com/did-the-president-contemplate-asking-liberman-to-try-to-force-a-unity-coalition/

We now reflect on the fact that the election was not decisive. This lack of decisiveness is due to two aspects, firstly the nature of the specific results, and secondly the nature of the criterion used, namely that the winner should be the party with an overall majority. There are a number of other criteria which do give a decisive result for this set of specific results:

.1. The party with the most seats is the winner.
As we have noted this is Blue & White. Mr Gantz did indeed say: "Blue and White, headed by me, has won the election".
.2. The party voted for by the median voter is the winner.
.3. The Condorcet winning party is the winner.

Consider then the median voter criterion. Table 3 above considers the frequency distribution of seats. Figure 7 below presents the cumulative frequency distribution. It can be seen that this cuts the median 60/61 line somewhere in the YB zone (Yisrael Beitenu).

Figure 7 Cumulative distribution of seats in Israel parliament. The median 60/61 line

% vote

parties   JL   LG   DU   BW   YB   L   Y   S   UTJ
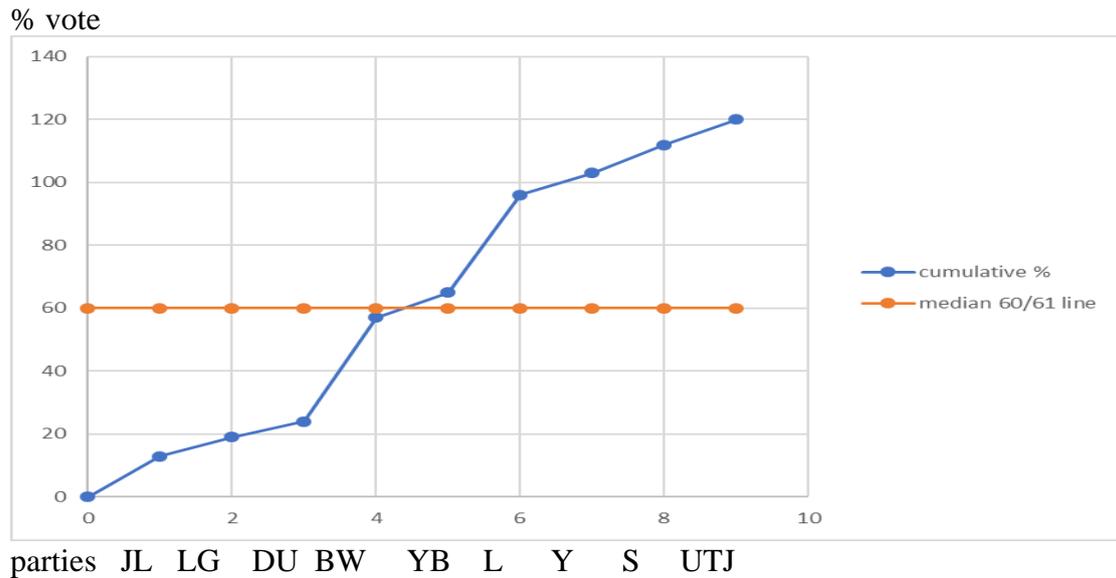
Consider now the Condorcet winning party criterion. Here too Yisrael Beitenu is the winner. Against any party on the left it receives at least the votes of the centre-right coalition. In particular it receives more votes than Blue & White. Against any party on the right it receives at least the votes of the centre-left coalition. In particular it receives more votes than Likud.

Note that the reasoning in the previous paragraph makes the assumption that preferences are single-peaked along the continuum. The fact that the median voter winner criterion and the Condorcet winning party criterion give the same result is a consequence of the median voter theorem.
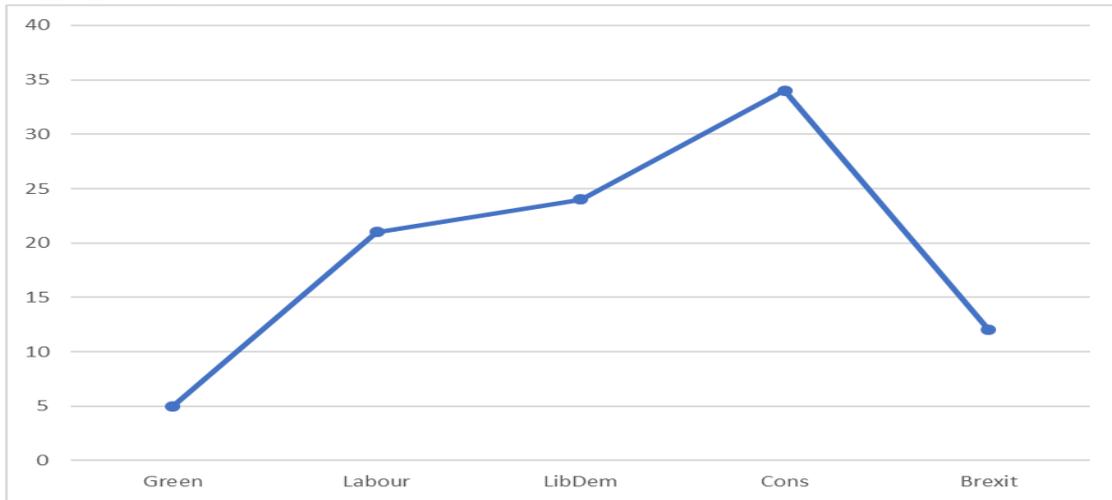

UK: the M distribution in two dimensions?

Here we look at the YouGov opinion poll results for UK parties for the three days ending on October 1, 2019. Figure 10 below shows the M-distribution for the parties along the familiar Left-Right dimension. The distribution is single-peaked although there is a faint trace of an M shape. Indeed most of the other polls do show Labour ahead of Lib Dems they give a weak M shape.

Currently in the UK, as well as the familiar left-right dimension, a second dimension has high salience: the Leave-Remain Brexit dimension. On this dimension the distribution has an M shape, albeit a weak one, with the difference between Labour and LibDem being small. On the Brexit dimension, Labour is the 'squeezed middle' – as John Curtice notes in the following section. See Figure 11.

Figure 10 UK: the M-distribution? on the Left-Right dimension

% intended vote

Figure 11 UK: the M-distribution on the Leave-Remain dimension

% intended vote