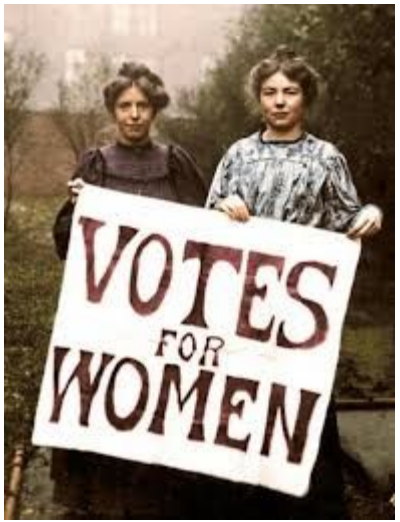
Predict, vote and elect with R

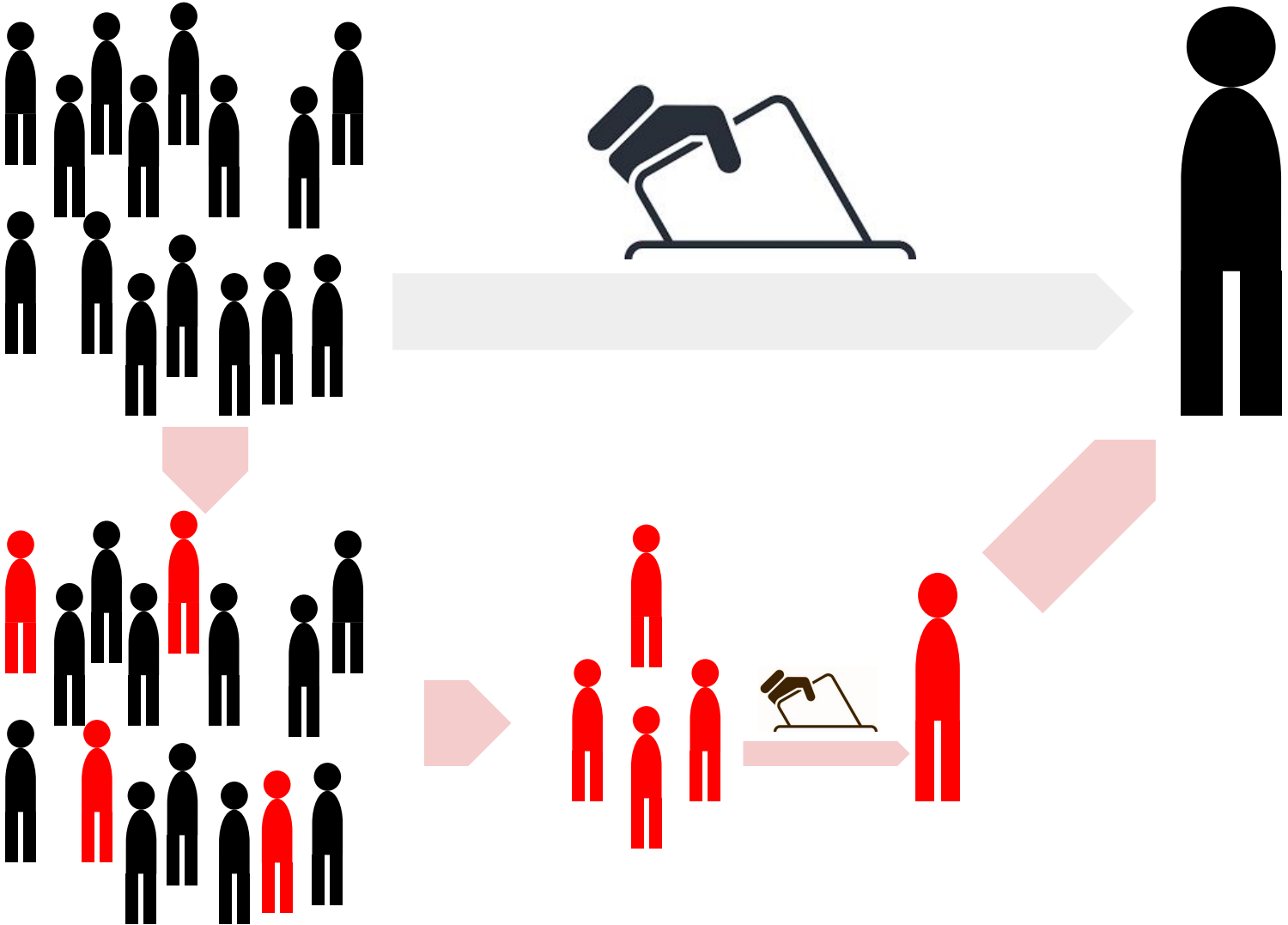
How data analytics and R have changed popular elections?

Why R? Conference Warsaw, 26-29.09.2019

Karol Klimas

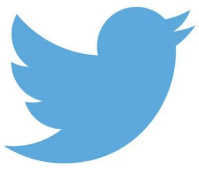

VOTES
FOR
WOMEN


VOTE




Survey
Questionnaire
Please tick:


Survey
Submit




betfair
William HILL
THE HOME OF BETTING

Leveraging Candidate Popularity On Twitter To Predict Election Outcome

Predicting US Primary Elections with Twitter

Election Vote Share Prediction using a Sentiment-based Fusion of Twitter Data with Google Trends and Online Polls

Neeraj Agarwal
R&D, Opera Solutions
Express Trade Towers, Plot 15-16,
Floor 5-6, Noida (UP), INDIA
neeraj.agarwal@
operasolutions.com

Rahul Garg
R&D, Opera Solutions

And the Winner is ...: Bayesian Twitter-based Prediction on 2016 U.S. Presidential Election

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lgium

Elvyna Tunggawan
Information System Department
Universitas Multimedia Nusantara

A Method for Predicting the Winner of the USA Presidential Elections using Data extracted from Twitter

Using Facebook Data to Predict the 2016 U.S. Presidential Election

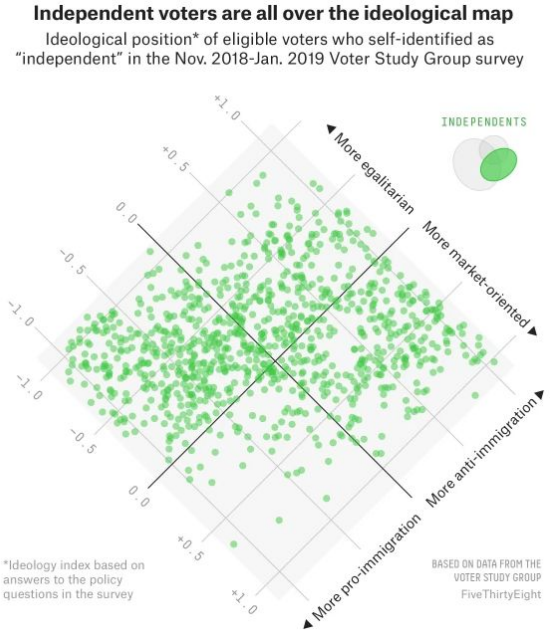
Keng-Chi Chang* Chun-Fang Chiang† Ming-Jen Lin‡

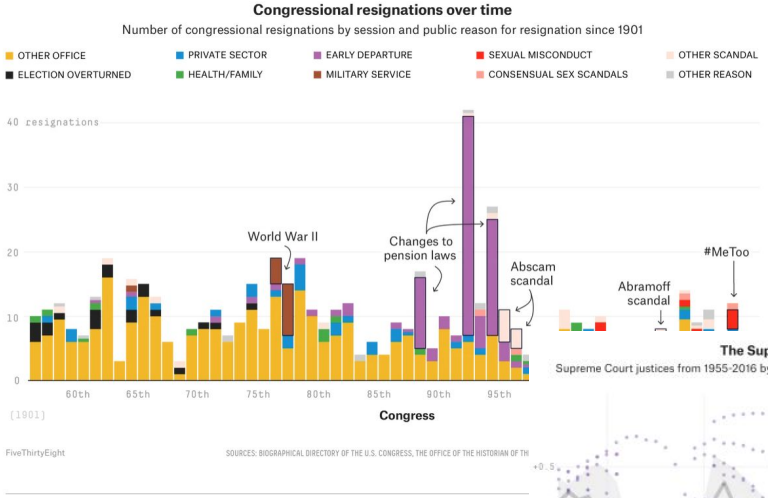
2018-10-15

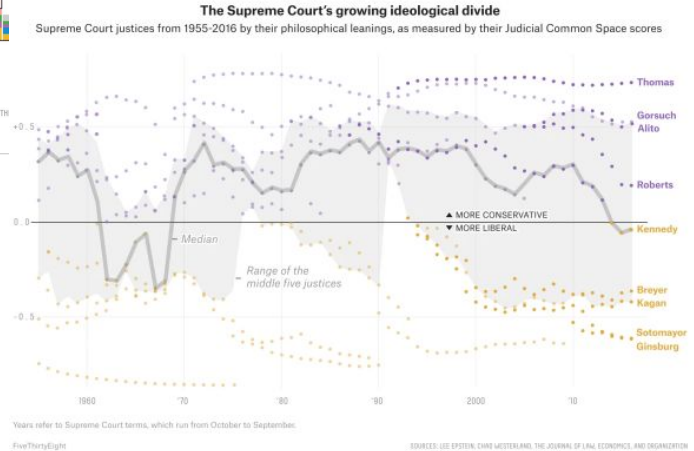
Lazaros Oikonomou
lining and Analytics Research Group,
ool of Science & Technology,
rnational Hellenic University,
Thermi, Greece

Christos Tjortjis
The Data Mining and Analytics Research Group,
School of Science & Technology,
International Hellenic University,
Thermi, Greece

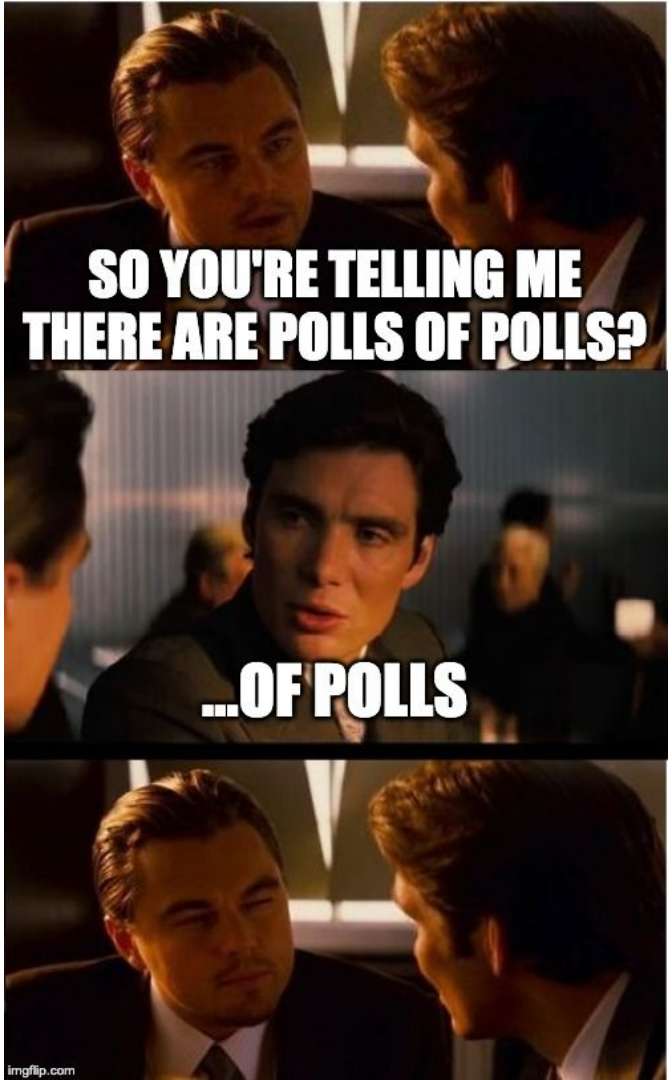
FiveThirtyEight





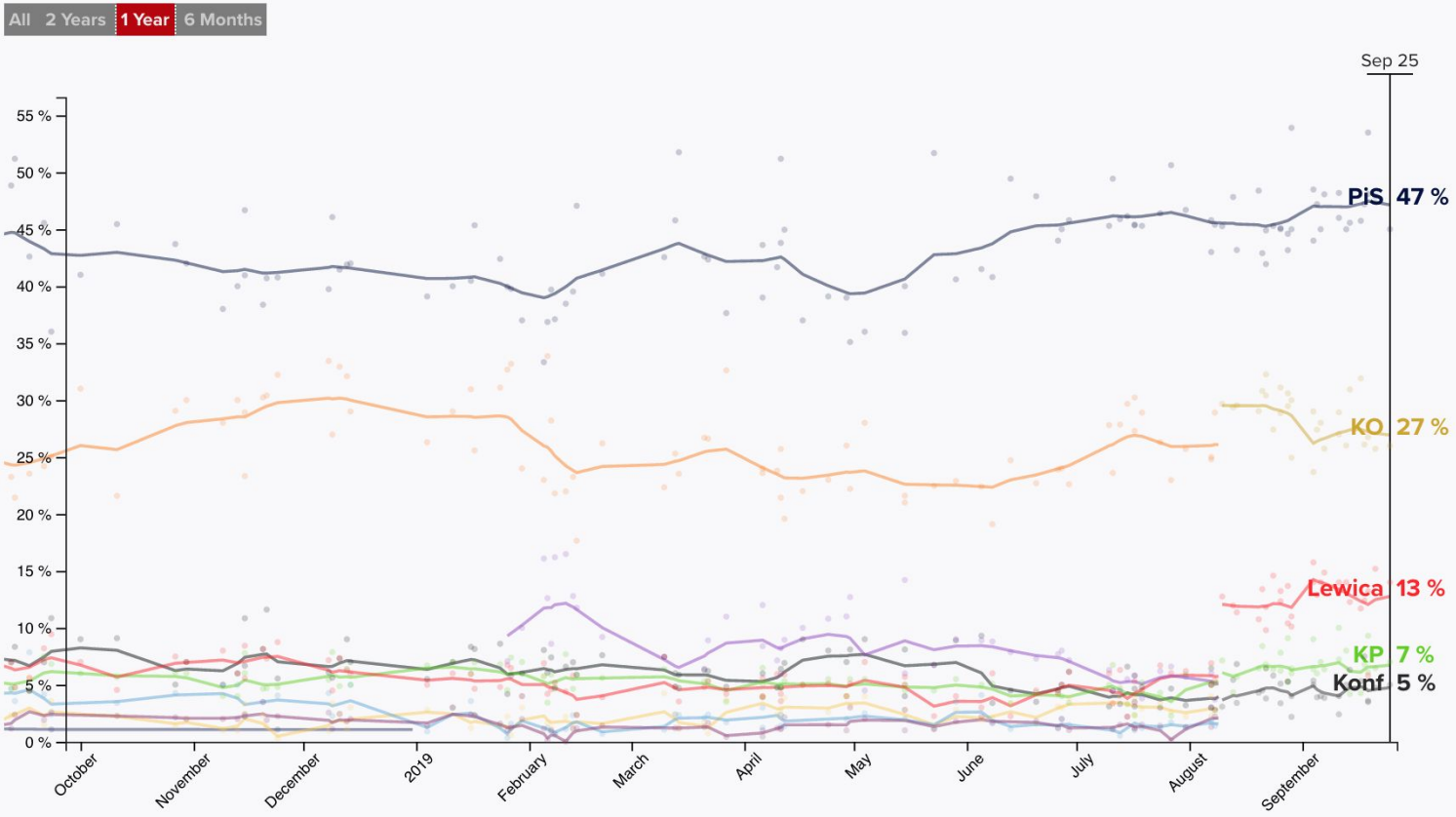


https://fivethirtyeight.com/features/the-45-best-and-weirdest-charts-we-made-in-2018/

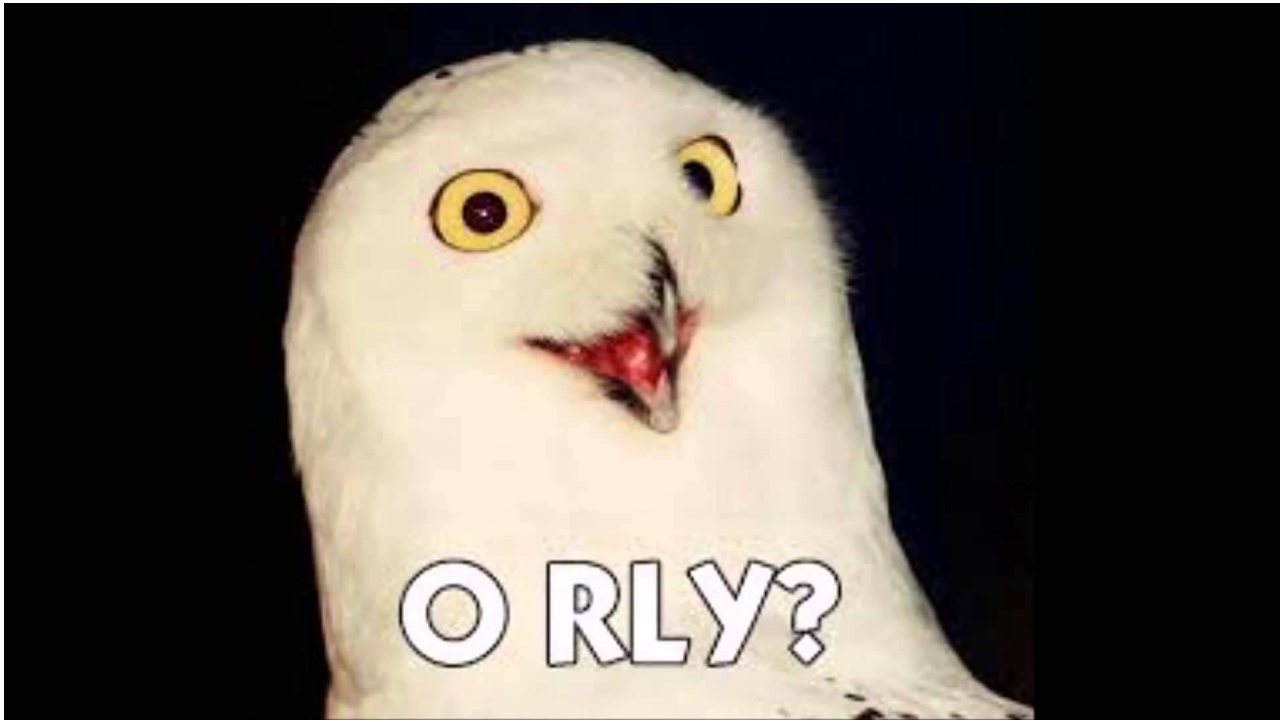

SO YOU'RE TELLING ME
THERE ARE POLLS OF POLLS?
...OF POLLS
imgflip.com

Poland — 2019 general election

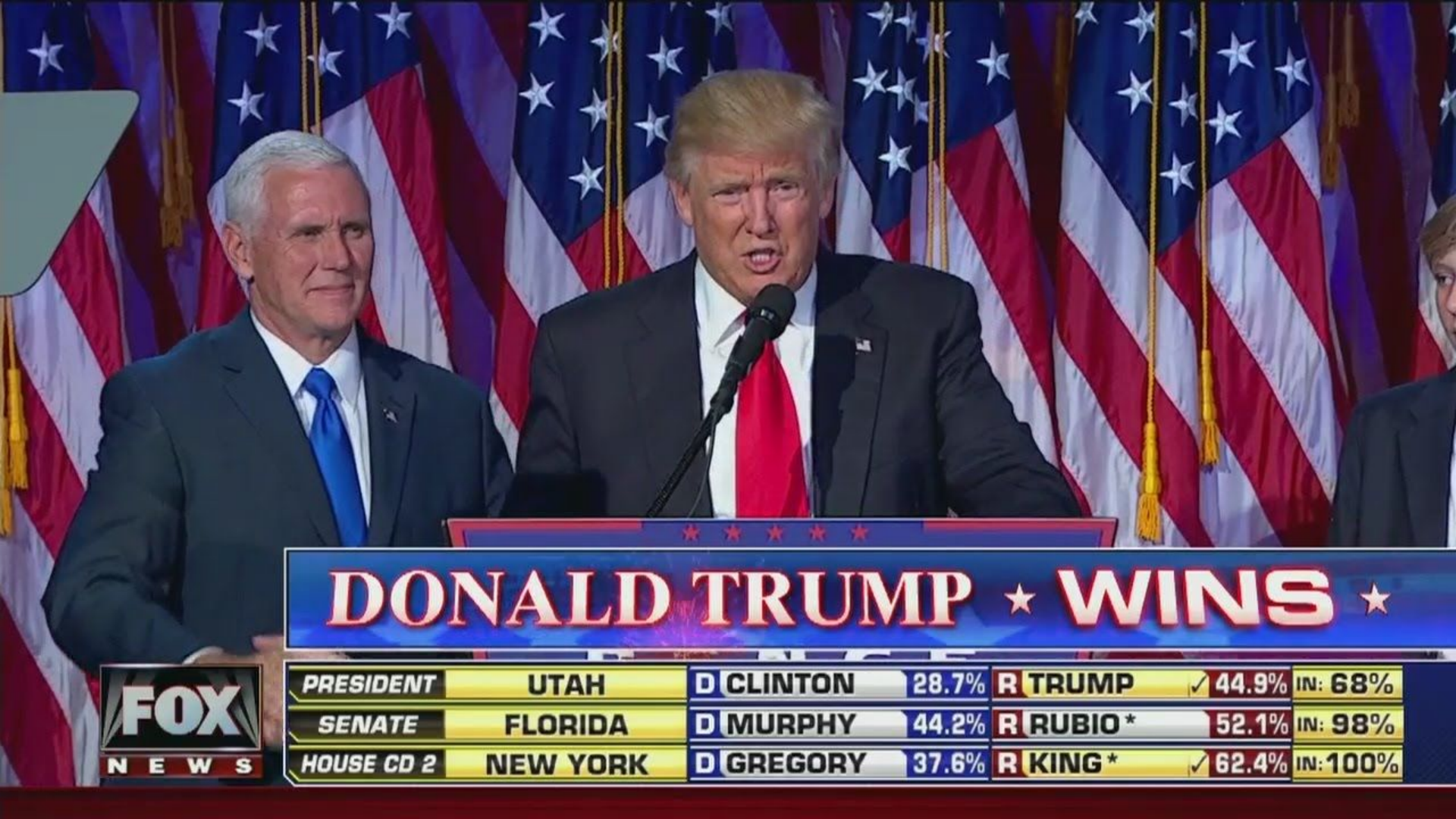
Poland goes to the polls on October 13 to elect a new parliament. Here's the latest polling data and projections from POLITICO Poll of Polls.



… thus we have achieved greatness in predicting election results and nothing can go wrong!



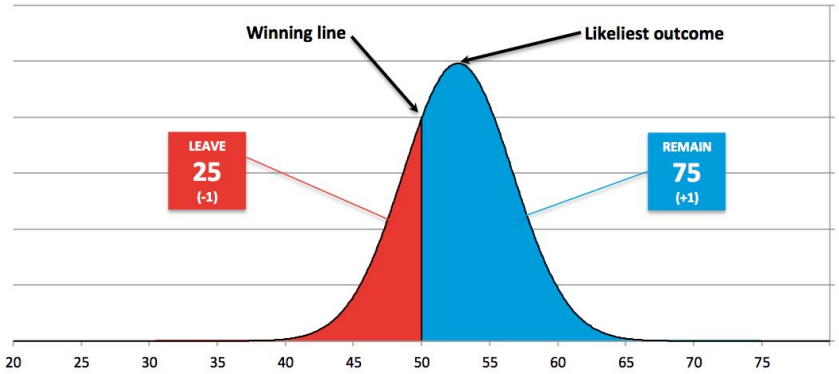

Today I voted
LEAVE
Let's take back control.


DONALD TRUMP ★ WINS ★
FOX NEWS
PRESIDENT UTAH D CLINTON 28.7% R TRUMP ✓ 44.9% IN: 68%
SENATE FLORIDA D MURPHY 44.2% R RUBIO * 52.1% IN: 98%
HOUSE CD 2 NEW YORK D GREGORY 37.6% R KING * ✓ 62.4% IN: 100%

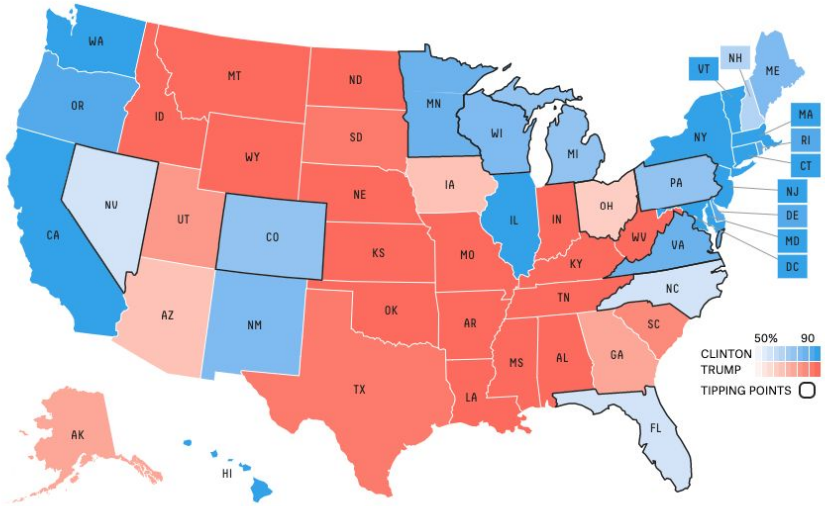
NCP EU referendum outcome probabilities

Modelled percentage probabilities of Remain vote share based on NCP polling average and historical data. As of 7am 23rd June. Data source: NCP

Number Cruncher Politics
www.NCPolitics.UK



Chance of winning



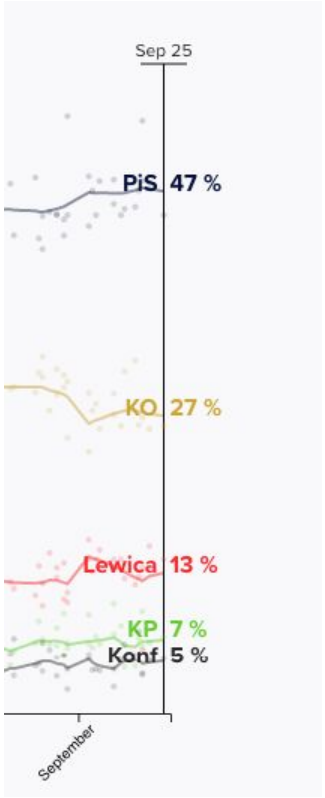
Electoral votes

Hillary Clinton	302.2
Donald Trump	235.0
Evan McMullin	0.8
Gary Johnson	0.0

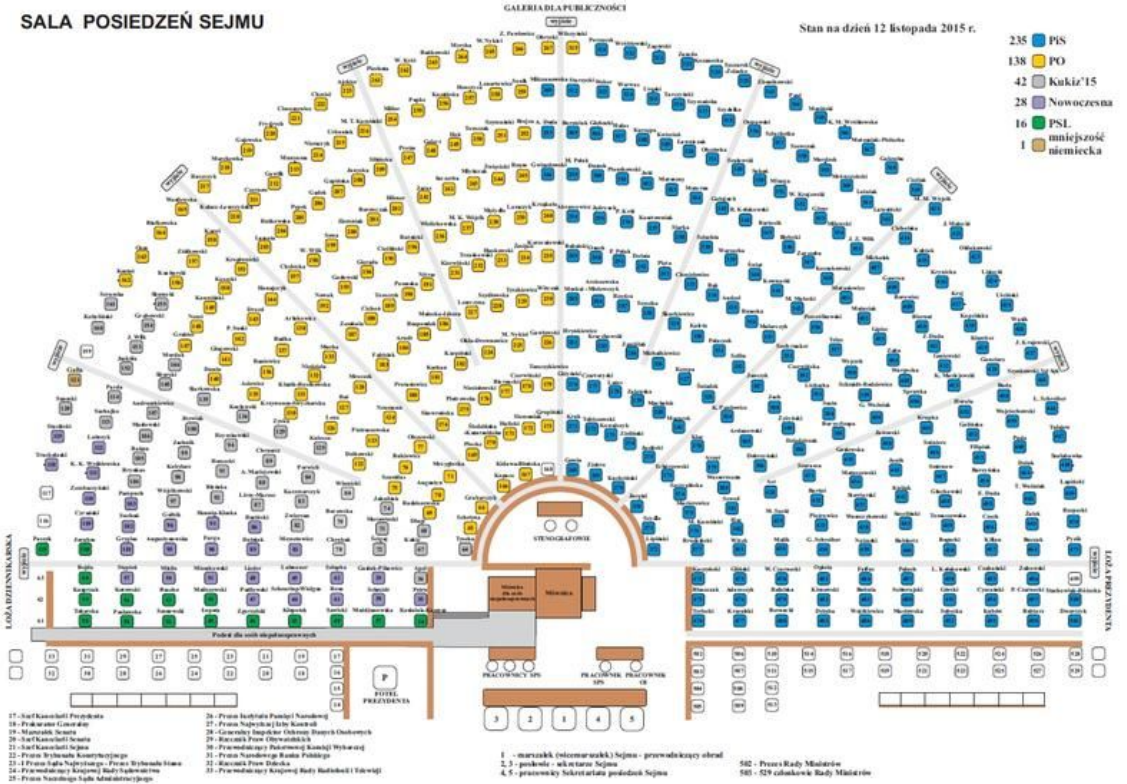
Popular vote

Hillary Clinton	48.5%
Donald Trump	44.9%
Gary Johnson	5.0%
Other	1.6%

Next parliamentary election in Poland will be held on 13th October 2019, can such an upset happen then?


Sep 25
PiS 47 %
KO 27 %
Lewica 13 %
KP 7 %
Konf 5 %
September

?


SALA POSIEDZEŃ SEJMU
GALERIA DLA PUBLICZNOŚCI
Stan na dzień 12 listopada 2015 r.
235 PiS
138 PO
42 Kukiz'15
28 Nowoczesna
16 PSL
1 mniejszość niemiecka
STENOGRAFOWIE
LOŻA DZIENNIKARSKA
LOŻA PREZYDENTA
FOTEL PREZYDENTA

D'Hondt method

From Wikipedia, the free encyclopedia

Allocation [edit]

After all the votes have been tallied, successive quotients are calculated for each party. The party with the largest quotient wins one seat, and its quotient is recalculated. This is repeated until the required number of seats is filled. The formula for the quotient is[11][1]

$$\text{quot} = \frac{V}{s+1}$$

where:

- V is the total number of votes that party received, and
- s is the number of seats that party has been allocated so far, initially 0 for all parties.

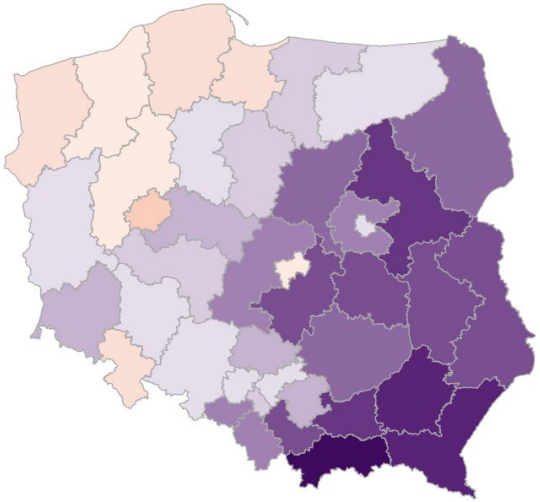
The total votes cast for each party in the electoral district is divided, first by 1, then by 2, then 3, up to the total number of seats to be allocated for the district/constituency. Say there are p parties and s seats. Then a grid of numbers can be created, with p rows and s columns, where the entry in the ith row and jth column is the number of votes won by the ith party, divided by j. The s winning entries are the s highest numbers in the whole grid; each party is given as many seats as there are winning entries in its row.

Example [edit]

In this example, 230,000 voters decide the disposition of 8 seats among 4 parties. Since 8 seats are to be allocated, each party's total votes is divided by 1, then by 2, 3, 4, 5, 6, 7, and 8. The 8 highest entries, marked with asterisks, range from **100,000** down to **25,000**. For each, the corresponding party gets a seat.

For comparison, the "Proportionate seats" column shows the exact fractional numbers of seats due, calculated in proportion to the number of votes received. (For example, 100,000/230,000 × 8 = 3.48) The slight favouring of the largest party over the smallest is apparent.

Denominator	1	2	3	4	Seats won (*)	Proportionate seats
Party A	**100,000***	**50,000***	**33,333***	**25,000***	**4**	3.5
Party B	**80,000***	**40,000***	**26,666***	20,000	**3**	2.8
Party C	**30,000***	15,000	10,000	7,500	**1**	1.0
Party D	20,000	10,000	6,666	5,000	**0**	0.7
Total					**8**	**8**



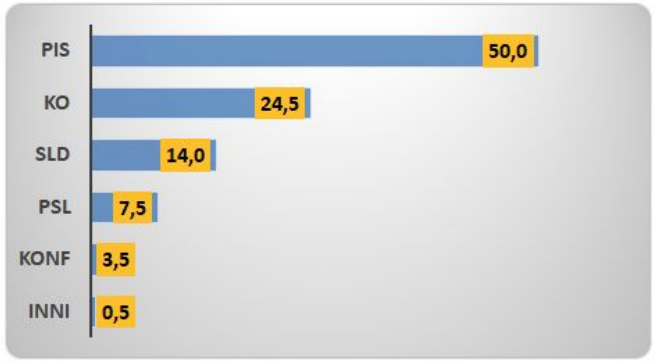
Marcin Palade
@MarcinPalade

Marcin Palade
@MarcinPalade

O sondażach, mediach, polityce i politykach, także z przymrużeniem oka. Zawodowo: psefologia (geografia wyborcza). W wolnym czasie podróże.

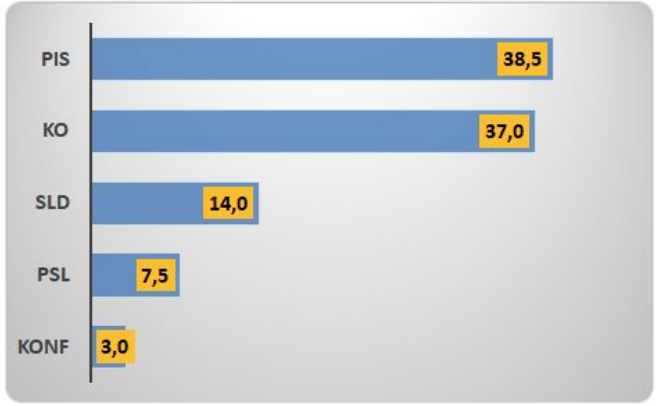
Warszawa, Polska

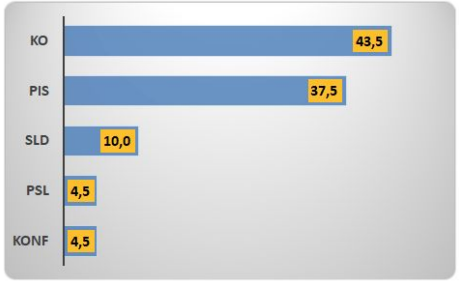
Dołączył grudzień 2013



Marcin Palade @MarcinPalade · 22 wrz

Prognoza sejmowych preferencji wyborczych w okręgu nr 38 (Piła) z 22 września 2019. Mandaty: @pisorgpl 4(5), @KObywatelska 3(4), @__Lewica 1, @nowePSL 0(1)





1 11 35

Let’s to back in time to 2015

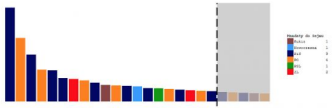
SmarterPoland.pl

Szukaj ...

- Blog
- Fundacja
- Wspieramy
- Wspierają nas

Jak głosować przeciw

Facebook Twitter Google+ LinkedIn

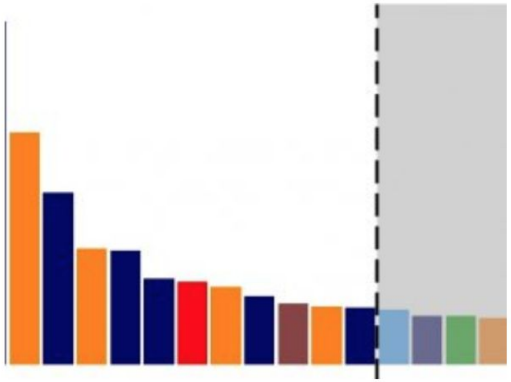


Na wczorajszym SERze mieliśmy ciekawą dodatkową prezentację (z uwagi na późne zgłoszenie nie uwzględnioną w programie) nt. aplikacji w shiny, która pomaga określić na kogo głosować jeżeli chce się głosować przeciw.

wykop.pl Wykopalisko 541 Hity Mikroblog

7

wykop



Jak głosować przeciw? Ile mandatów dostanie dana partia?

@damiinho niewsejmie.pl #polska #statystyka #wybory #ciekawostki

Jeśli nie masz na kogo głosować, a nie lubisz jakiejś partii – strona podpowie ci jak najefektywniej zrobić jej na złość. Oprócz tego w zgrabny sposób pokaże ile osób otrzyma mandat posła (oraz jak wiele brakuje do kolejnego) w danym okręgu przy określonym wyniku procentowym wg metody D’Hondta.

Let's see the app!

How many seats will they get?

KOMITET WYBORCZY PSL

7

KW PRAWO I SPRAWIEDLIWOŚĆ

38

KW SOJUSZ LEWICY DEMOKRATYCZNEJ

10,5

KW KONFEDERACJA

4,5

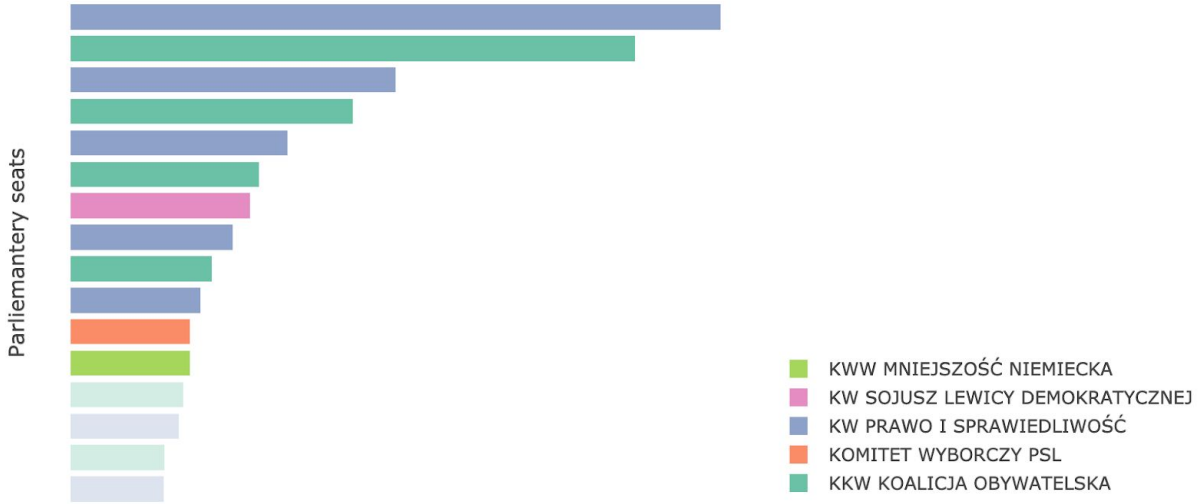
KKW KOALICJA OBYWATELSKA

33

KWW MNIEJSZOŚĆ NIEMIECKA

7

Total suport is 100%



Committee KW PRAWO I SPRAWIEDLIWOŚĆ has won 5 seat(s).
Committee KKW KOALICJA OBYWATELSKA has won 4 seat(s).
Committee KW SOJUSZ LEWICY DEMOKRATYCZNEJ has won 1 seat(s).
Committee KOMITET WYBORCZY PSL has won 1 seat(s).
Committee KWW MNIEJSZOŚĆ NIEMIECKA has won 1 seat(s).

Thanks!

Contact me on LinkedIn