Parliament Dot Plots

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Contents

```
knitr::opts_chunk$set(echo = TRUE, warning=FALSE)
source("geom_parliament_dots.R")
source("scale_colours_parties.R")
load("election_data.rda")
library(ggparliament)
library(tidyverse)
```

```
## Loading tidyverse: ggplot2
## Loading tidyverse: tibble
## Loading tidyverse: tidyr
## Loading tidyverse: readr
## Loading tidyverse: purrr
## Loading tidyverse: dplyr

## Warning: package 'tibble' was built under R version 3.4.3

## Warning: package 'tidyr' was built under R version 3.4.3

## Warning: package 'purrr' was built under R version 3.4.2

## Warning: package 'dplyr' was built under R version 3.4.2

## Conflicts with tidy packages ----------------------------------------------

## filter(): dplyr, stats
## lag():    dplyr, stats
```

```
library(patchwork)
```

Unique parliament layouts:

Monkey Cage article : https://www.washingtonpost.com/news/monkey-cage/wp/2017/03/04/these-5-designs-influence-every-l
?utm_term=.e1e1c1c3c37b

Opposing benches parliament
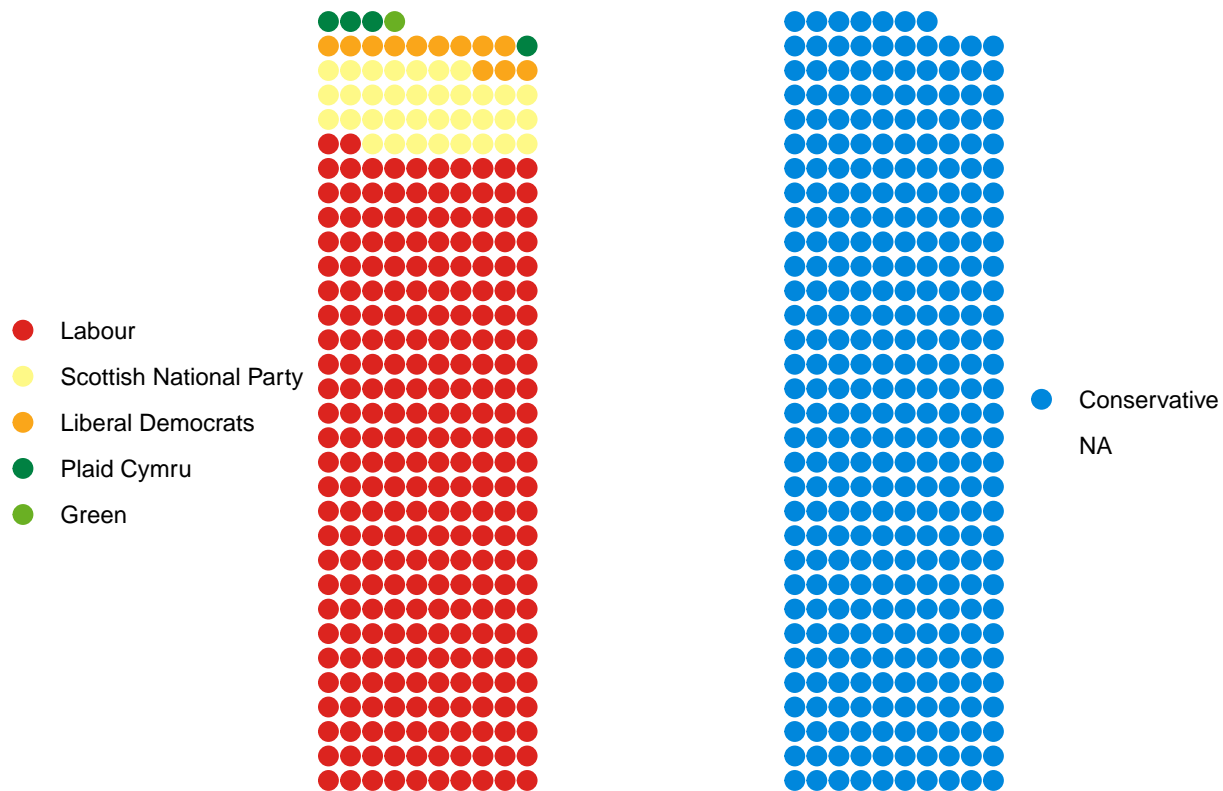
United Kingdom, Canada

Data
```r
ukresults <- election_data %>%
  filter(country=="UK" & year == 2017)
ukresults$seats <- as.numeric(ukresults$seats)
left_parties <- c("Labour","Scottish National Party","Liberal Democrats","Green","Plaid Cymru", "Ind")
ukresults$location <-
  ifelse(ukresults$party_long %in% left_parties, "left",
         ifelse(ukresults$party_long ==c("Conservative", "Democratic Unionist"), "right",
                    NA  ))
ukresults_left <- ukresults %>%
  filter(location=="left")

ukresults_right <- ukresults %>%
  filter(location=="right")
```

Plot
```r
leftside <- ggplot() + geom_parliament_dots(type="opposing_benches", seatspp = ukresults_left$seats, si

rightside <- ggplot() + geom_parliament_dots(type="opposing_benches", seatspp = ukresults_right$seats, s

uk_parliament <- combine_opposingbenches(left = leftside, right = rightside)
uk_parliament
```

- 🔴 Labour
- 🟡 Scottish National Party
- 🟠 Liberal Democrats
- 🟢 Plaid Cymru
- 🟢 Green

🔵 Conservative

NA

Semicircle parliament

EU, France, United States, and so on...

Data

```
americandata <- data(US_congress)
americandata <- US_congress
US_congress1 <- americandata %>%
  filter(start_year=="2017" & chamber=="lower")
US_senate <- americandata %>%
  filter(start_year=="2017" & chamber=="upper")
```
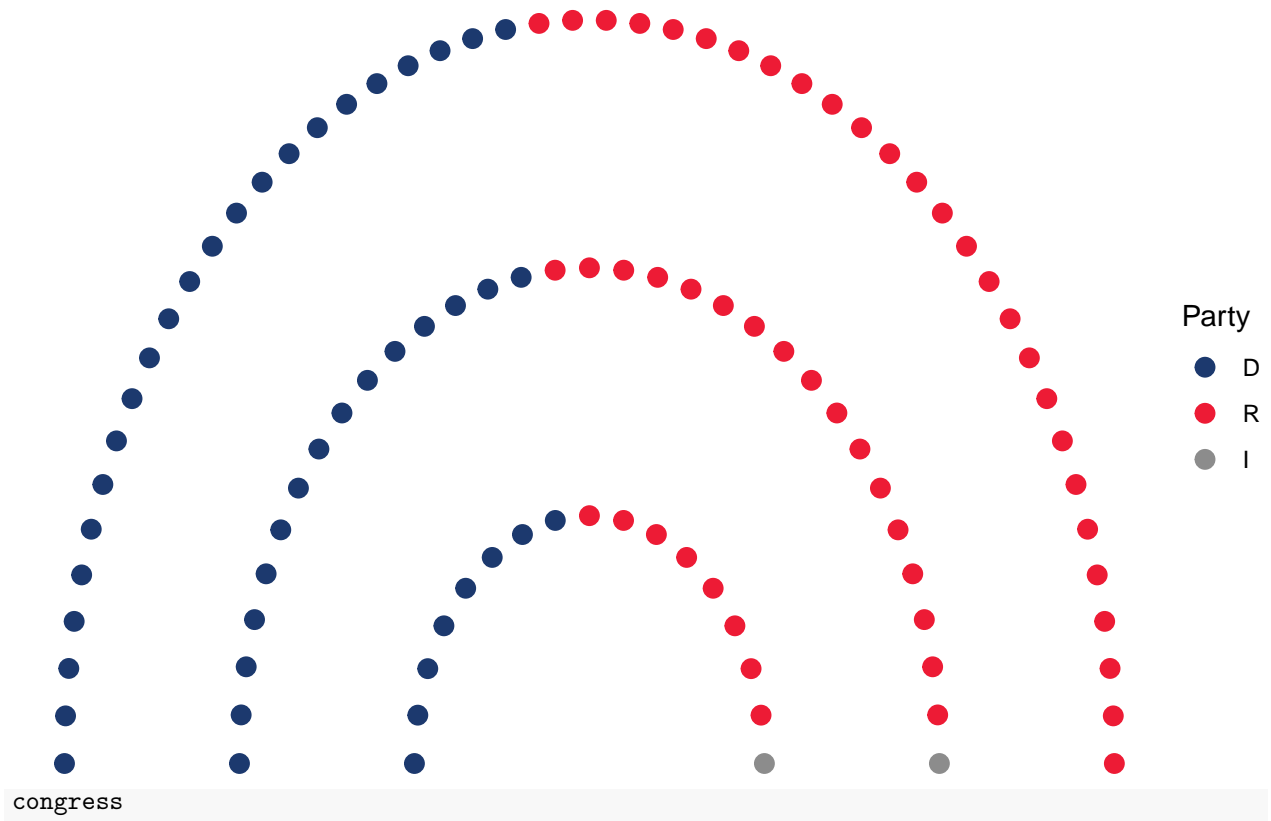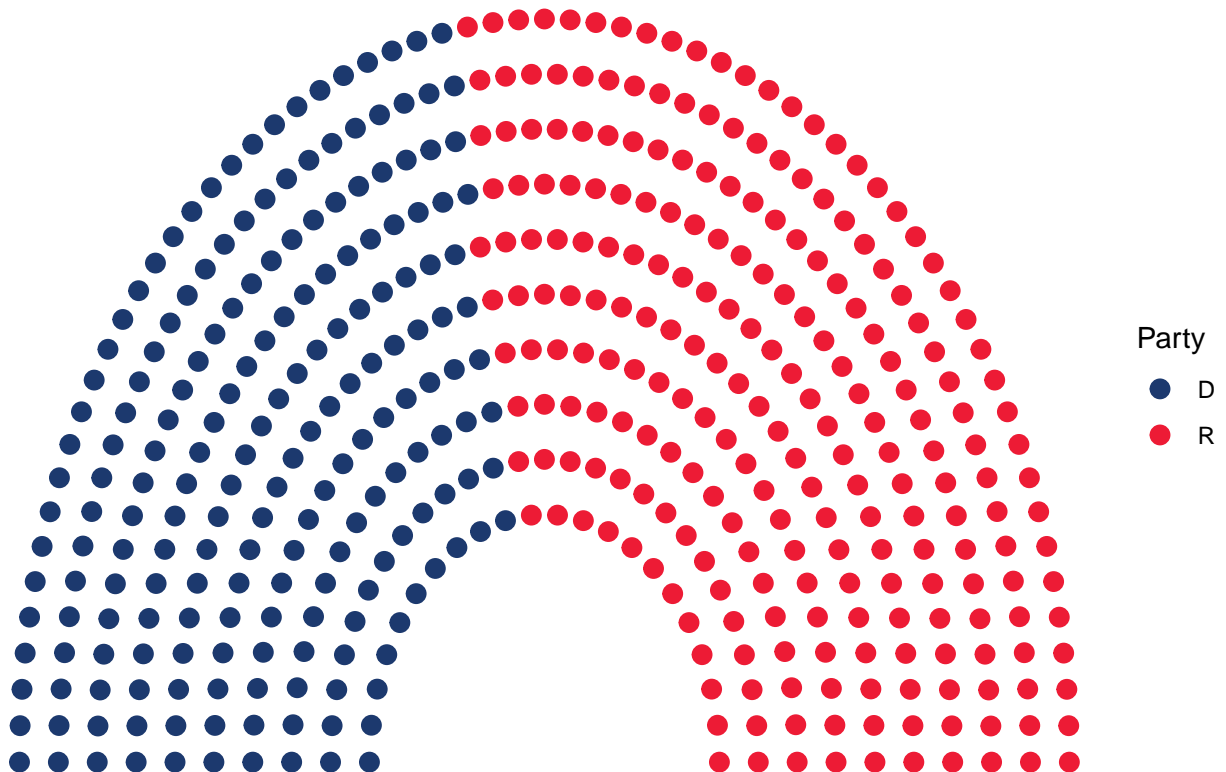
Plot

```
congress <- ggplot() + geom_parliament_dots(type='semicircle', totalseats=sum(US_congress1$seats), parl
#When I write scale_colour_party, Republicans show up as grey. Trying to fix it but in the meantime, th
#It works below, however. :\
senate <- ggplot() + geom_parliament_dots(type='semicircle', totalseats=sum(US_senate$seats), parlrows=
senate
```

United States Senate

Party

- D
- R
- I

`congress`

United States Congress

Party

- D
- R

4

Horseshoe parliament

Australia, New Zealand

Data

```r
# load data
AustralianElections <- pscl::AustralianElections
# filter to 2016, slice percent, total seats
AustralianElections <- AustralianElections %>%
  filter(date == "2016-07-02") %>%
  gather() %>%
  slice(-c(1:3, 8:19))

# reorder rows into parliament layout (i.e. independents in the middle of the circle btwn the two major
AustralianElections <- AustralianElections[c(1, 4, 3, 2), ]
AustralianElections$key <- factor(AustralianElections$key)
# clean labels
AustralianElections$key <- gsub("Seats", "", AustralianElections$key)
au <- AustralianElections
new_au_data <- parliament_data(data=au, seats=au$value, type='horseshoe')



au_elections <- election_data %>%
  filter(year==2016 & country=="Australia" & house=="Representatives")
#new_au_data <- parliament_data(data=au_elections, seats=au_elections$seats, type='horseshoe')
```
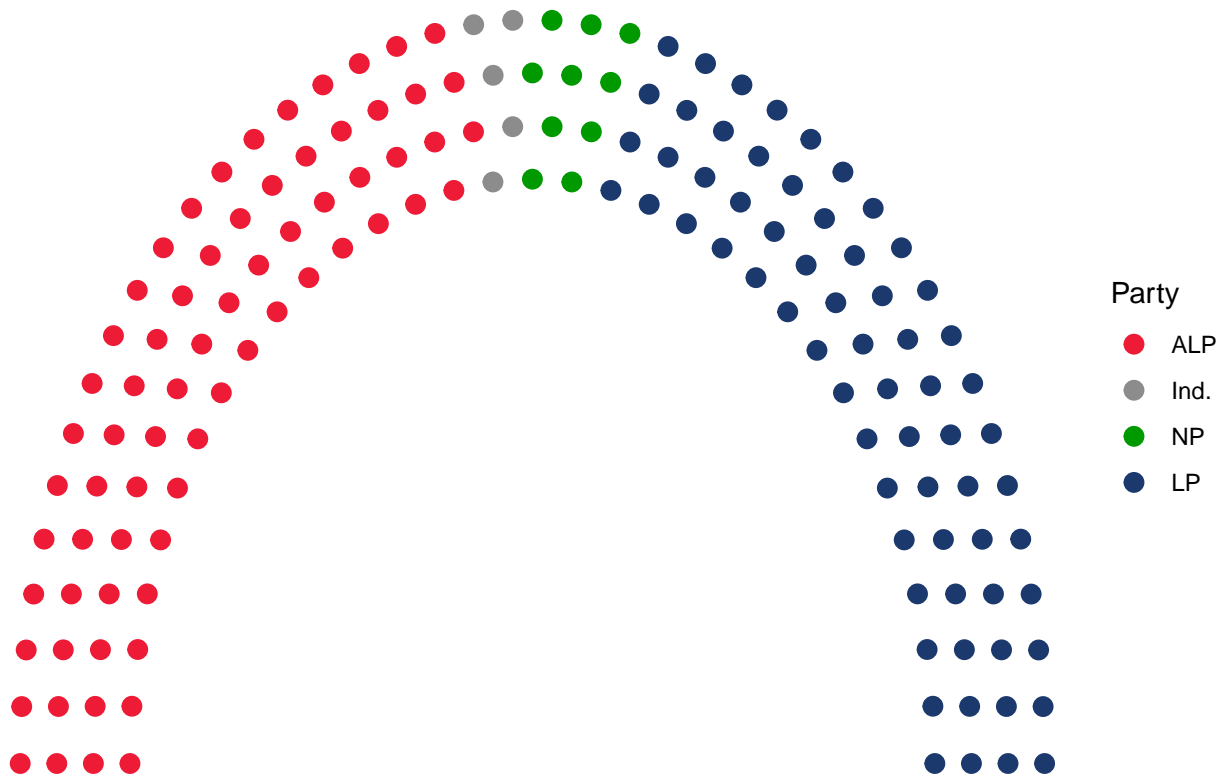
Plot

```r
a <- ggplot() + geom_parliament_dots(type='horseshoe', totalseats=sum(new_au_data$value), parlrows = 4,
a
```
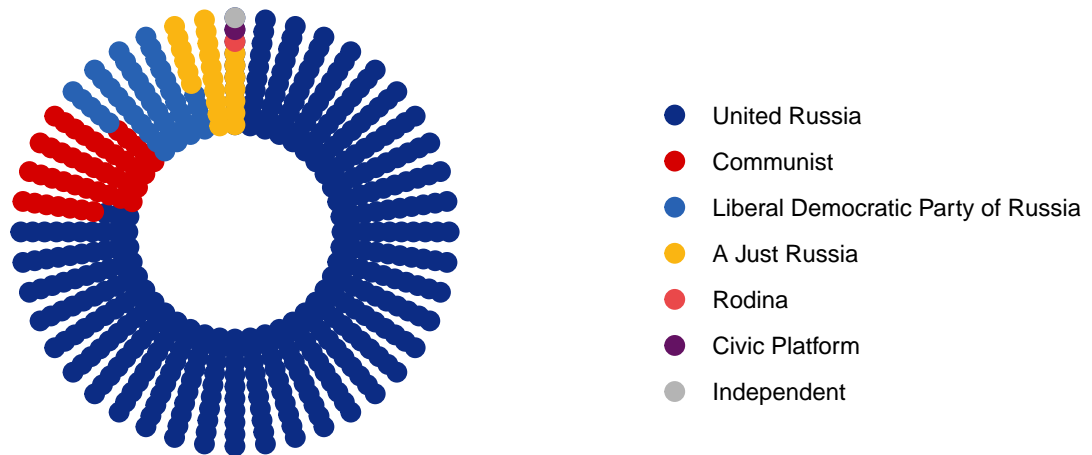
Horseshoe parliament: Australia

Circle parliament

old German Bundestag (find more modern examples).

```r
russia <- election_data %>%
  filter(country=="Russia" & year==2016)

ggplot() + geom_parliament_dots(type="circle", seatspp = russia$seats, size = 3, party_name = russia$par
  scale_colour_manual(values=c(russia$colour), labels=c(russia$party_long), limits=c(russia$party_long)
```

Russian Parliament

Classroom parliament

China, Russia, North Korea

```
ggplot() + geom_parliament_dots(type="classroom", seatspp = russia$seats, size = 3, party_name = russia$
  scale_colour_manual(values=c(russia$colour), labels=c(russia$party_long), limits=c(russia$party_long))
```

Russian Parliament

- ● United Russia
- ● Communist
- ● Liberal Democratic Party of Russia
- ● A Just Russia
- ● Rodina
- ● Civic Platform
- ● Independent