Political leanings survey analysis

```
library(tidyverse)
```

```
## -- Attaching packages ---------------------------------------------------------------------------
## v ggplot2 3.3.0     v purrr   0.3.3
## v tibble  2.1.3     v dplyr   0.8.4
## v tidyr   1.0.2     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.5.0
## -- Conflicts ------------------------------------------------------------------------------------
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(knitr)
```

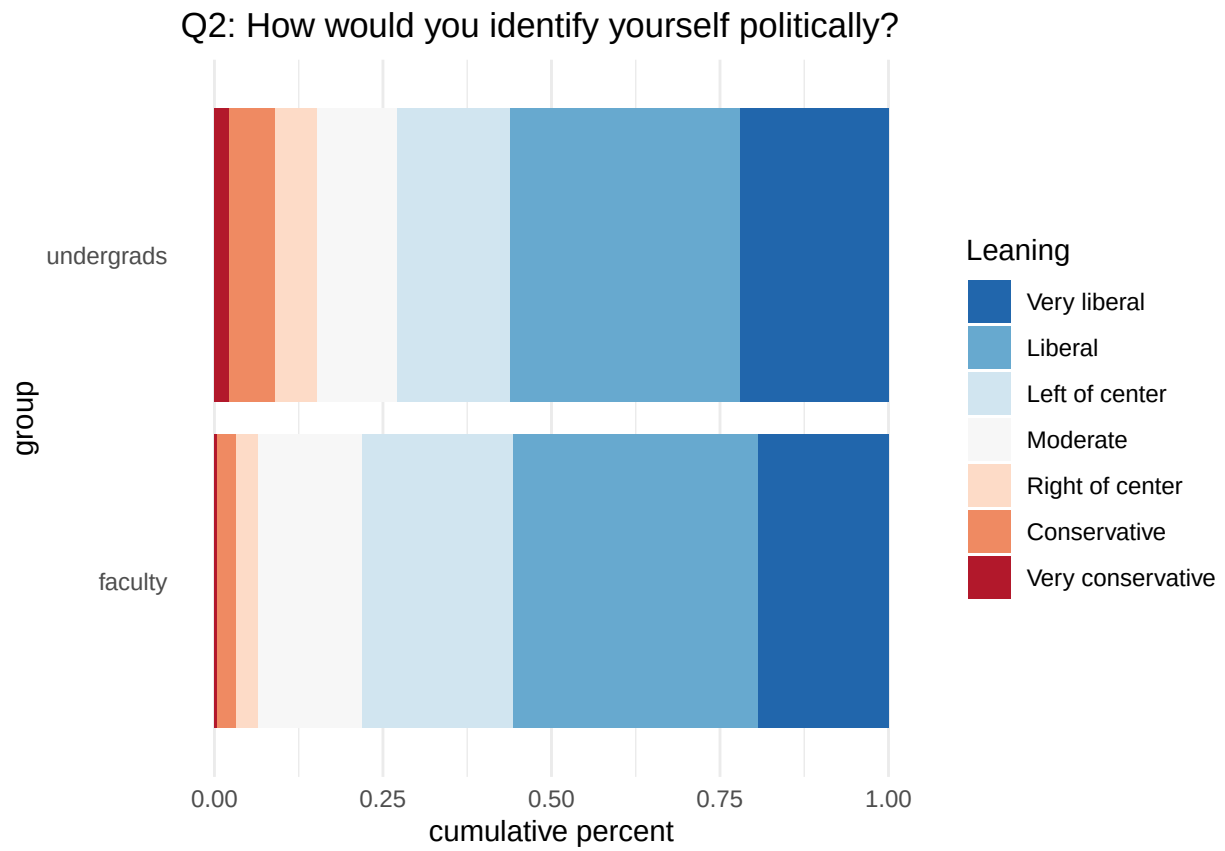
Q2 Leanings:

```
names <- c("Very conservative",
           "Conservative",
           "Right of center",
           "Moderate",
           "Left of center",
           "Liberal",
           "Very liberal")

undergrads <- c(31, 96, 90, 167, 238, 484, 312)
faculty <- c(1, 8, 9, 43, 62, 101, 54)
```

```
q2 <- data.frame(
    leaning = names,
    undergrads,
    faculty
)
```

```
q2 %>%
    tidyr::pivot_longer(-leaning) %>%
    ggplot(aes(name, value, fill = leaning %>% fct_relevel(names) %>% fct_rev())) +
    geom_bar(stat = "identity", position = "fill") +
    coord_flip() +
    scale_fill_brewer(palette = "RdBu", direction = -1) +
    labs(x = "group", y = "cumulative percent", fill = "Leaning",
         title = "Q2: How would you identify yourself politically?") +
    theme_minimal() +
    theme(panel.grid.major.y = element_blank())
```



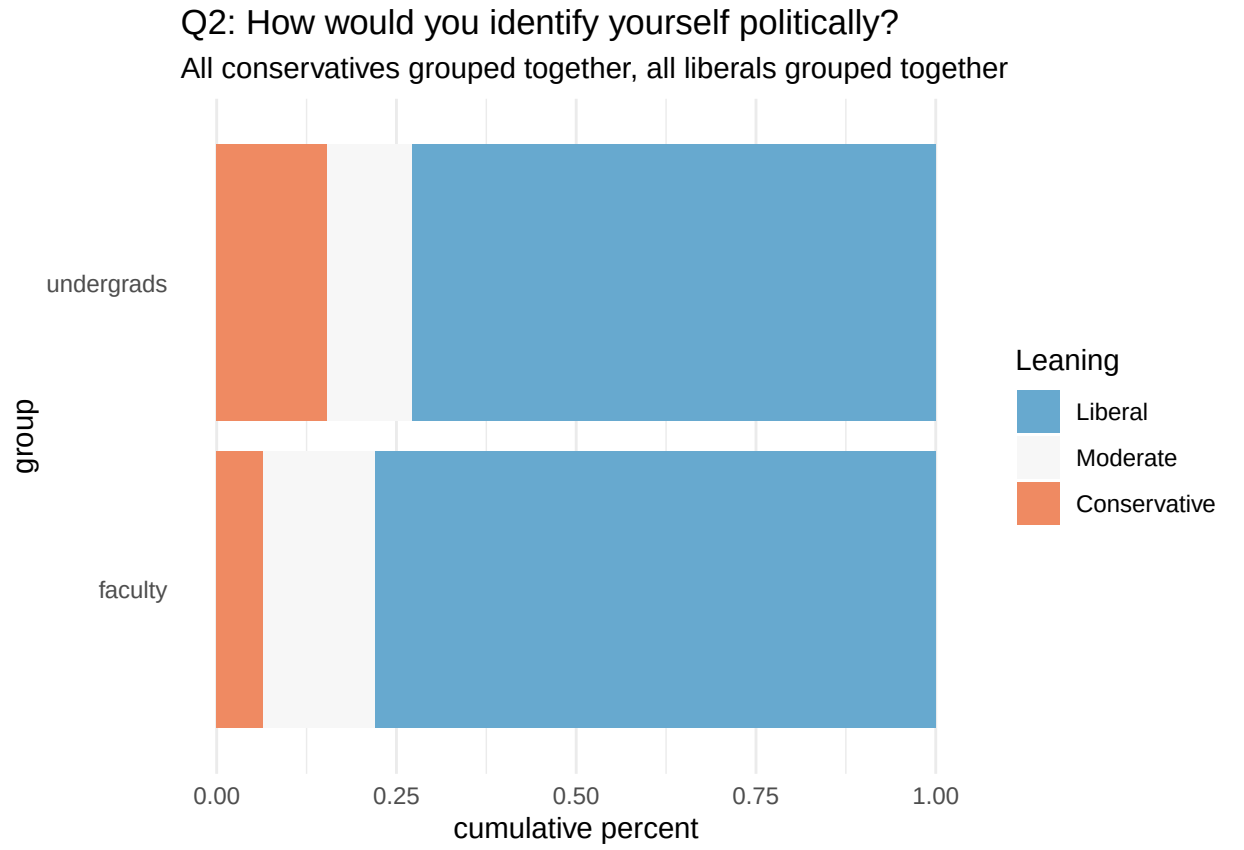

```
q2[, 2:3] %>%
    as.matrix() %>%
    t() %>%
    `colnames<-`(names) %>%
    prop.table(margin = 1) %>%
    as.data.frame.matrix() %>%
    round(4) %>%
    `*`(100) %>%
    kable()
```

	Very conservative	Conservative	Right of center	Moderate	Left of center	Liberal	Very liberal
undergrads	2.19	6.77	6.35	11.78	16.78	34.13	22.00
faculty	0.36	2.88	3.24	15.47	22.30	36.33	19.42

```
q2_sum <- q2 %>%
    mutate(leaning = c("Conservative", "Conservative", "Conservative", "Moderate", "Liberal", "Liberal"
    group_by(leaning) %>%
    summarize(undergrads = sum(undergrads),
              faculty = sum(faculty))
```

```
q2_sum %>%
    tidyr::pivot_longer(-leaning) %>%
    ggplot(aes(name, value, fill = leaning %>% fct_relevel(c("Conservative", "Moderate", "Liberal")) %>%
    geom_bar(stat = "identity", position = "fill") +
    coord_flip() +
```

```
    scale_fill_brewer(palette = "RdBu", direction = -1) +
    labs(x = "group", y = "cumulative percent", fill = "Leaning",
         title = "Q2: How would you identify yourself politically?",
         subtitle = "All conservatives grouped together, all liberals grouped together") +
    theme_minimal() +
    theme(panel.grid.major.y = element_blank())
```




```
q2_sum[, 2:3] %>%
    as.matrix() %>%
    t() %>%
    `colnames<-`(c("Conservative", "Moderate", "Liberal")) %>%
    prop.table(margin = 1) %>%
    as.data.frame.matrix() %>%
    round(4) %>%
    `*`(100) %>%
    kable()
```

	Conservative	Moderate	Liberal
undergrads	15.30	72.92	11.78
faculty	6.47	78.06	15.47

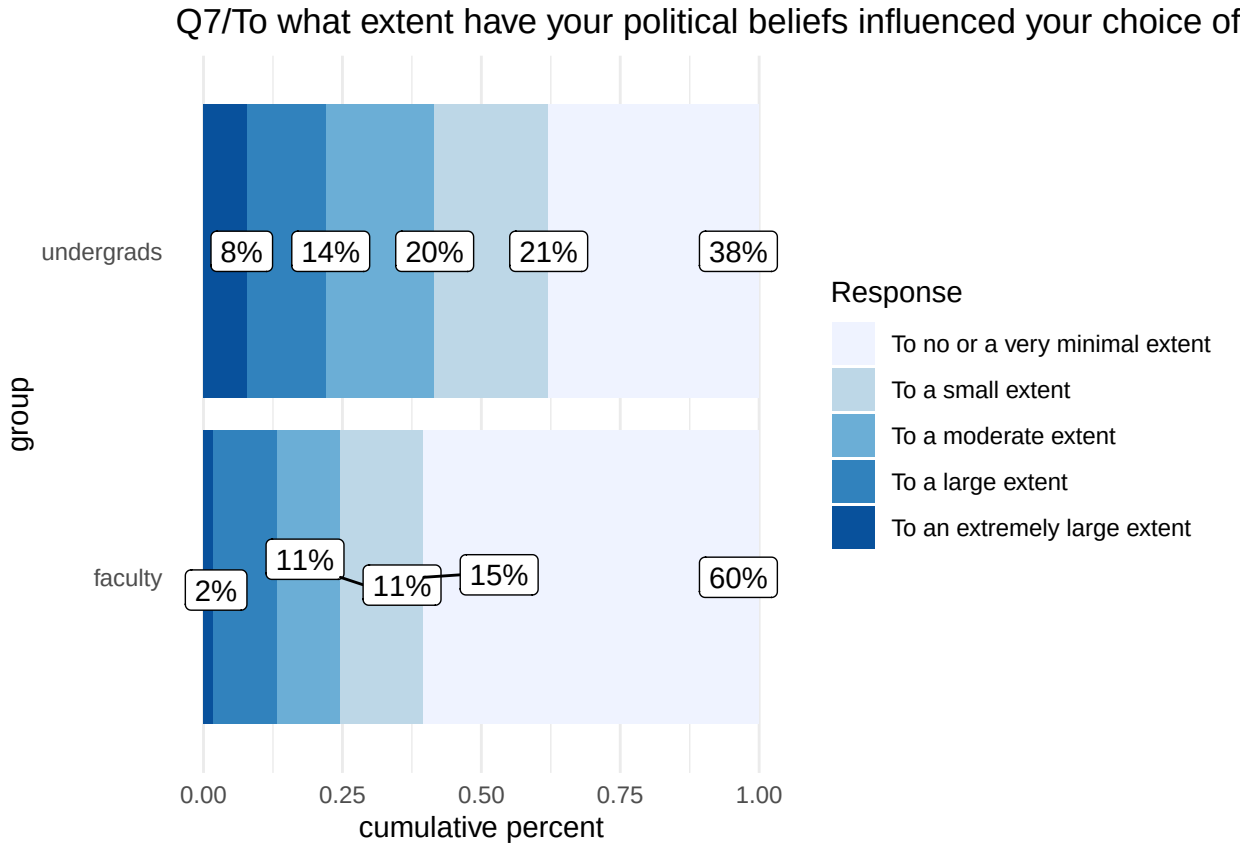
Q7 Choice of academic field:

```
names <- c("To an extremely large extent",
           "To a large extent",
           "To a moderate extent",
           "To a small extent",
           "To no or a very minimal extent")

undergrads <- c(112, 202, 278, 292, 539)
faculty <- c(5, 32, 32, 42, 169)
```

```
q7 <- data.frame(
    response = names,
    undergrads,
    faculty
)
```

```
q7 %>%
    tidyr::pivot_longer(-response) %>%
    group_by(name) %>%
    mutate(percent = value / sum(value),
           percent = paste0(round(100 * percent), "%")) %>%
    ggplot(aes(name, value)) +
    geom_bar(aes(fill = response %>% fct_relevel(names) %>% fct_rev()), stat = "identity", position = "
    ggrepel::geom_label_repel(aes(label = percent), position = "fill", point.padding = NA) +
    coord_flip() +
    scale_fill_brewer() +
    labs(x = "group", y = "cumulative percent", fill = "Response",
         title = "Q7/To what extent have your political beliefs influenced your choice of field?") +
    theme_minimal() +
    theme(panel.grid.major.y = element_blank())
```


Q7/To what extent have your political beliefs influenced your choice of
undergrads
faculty
group
8%
14%
20%
21%
38%
2%
11%
11%
15%
60%
0.00
0.25
0.50
0.75
1.00
cumulative percent
Response
To no or a very minimal extent
To a small extent
To a moderate extent
To a large extent
To an extremely large extent