

TidyTuesday_01.26.21

Ochiwar

11/13/2020

Download Data

```
tuesdata <- tidyTuesdayR::tt_load(2021, week = 13)
```

```
##
## Downloading file 1 of 3: `unvotes.csv`
## Downloading file 2 of 3: `roll_calls.csv`
## Downloading file 3 of 3: `issues.csv`
```

```
unvotes <- tuesdata$unvotes
issues <- tuesdata$issues
roll_calls <- tuesdata$roll_calls
```

```
glimpse(unvotes)
```

```
## Rows: 869,937
## Columns: 4
## $ rcid      <dbl> 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, ~
## $ country   <chr> "United States", "Canada", "Cuba", "Haiti", "Dominican Re~
## $ country_code <chr> "US", "CA", "CU", "HT", "DO", "MX", "GT", "HN", "SV", "NI~
## $ vote      <chr> "yes", "no", "yes", "yes", "yes", "yes", "yes", "yes", "y~
```

```
glimpse(issues)
```

```
## Rows: 5,745
## Columns: 3
## $ rcid      <dbl> 77, 9001, 9002, 9003, 9004, 9005, 9006, 128, 129, 130, 131,~
## $ short_name <chr> "me", "me", "me", "me", "me", "me", "me", "me", "me", "me",~
## $ issue     <chr> "Palestinian conflict", "Palestinian conflict", "Palestina~
```

```
glimpse(roll_calls)
```

```
## Rows: 6,202
## Columns: 9
## $ rcid      <dbl> 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,~
## $ session    <dbl> 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,~
## $ importantvote <dbl> 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,~
## $ date       <date> 1946-01-01, 1946-01-02, 1946-01-04, 1946-01-04, 1946-01~
## $ unres      <chr> "R/1/66", "R/1/79", "R/1/98", "R/1/107", "R/1/295", "R/1~
## $ amend      <dbl> 1, 0, 0, 0, 1, 1, 0, 1, 0, 1, 1, 1, 1, 1, 1, 1, 0, 0,~
## $ para       <dbl> 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 1, 1, 1, 1, 0, 0, 0, 0,~
## $ short      <chr> "AMENDMENTS, RULES OF PROCEDURE", "SECURITY COUNCIL ELEC~
## $ descr      <chr> "TO ADOPT A CUBAN AMENDMENT TO THE UK PROPOSAL REFERRING~
```

EDA

Determine which country abstains the most in UN Votes

```

abstain_top10 <- unvotes %>%
  count(country, vote) %>%
  filter(vote == "abstain") %>%
  slice_max(n = 10, order_by = n) %>% #Use slice_max to order data
  # arrange(desc(n)) %>%
  # slice(1:10) %>%
  ggplot(aes(n, fct_reorder (country, n), label = n)) +
  geom_col(fill = "skyblue") +
  geom_text(hjust = 1.3) +

  labs(x = "", y = "",
        title = "Countries with the most Abstain Votes",
        subtitle = "Top 10") +

  theme_ipsum_ps() +

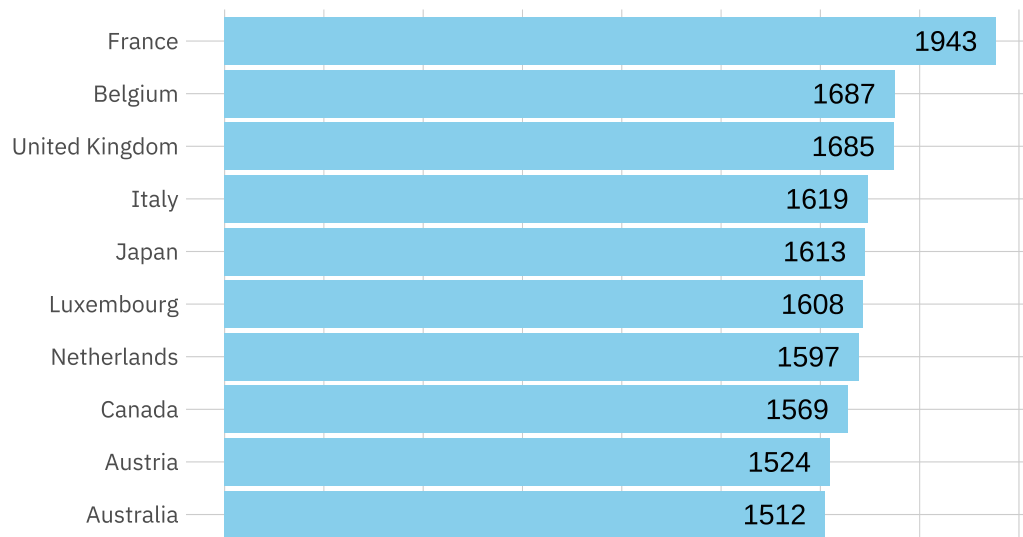
  theme(
    plot.title = element_text(family = "IBMPlexSans", face = "bold"),
    axis.title.x=element_blank(),
    axis.text.x=element_blank(),
    axis.ticks.x=element_blank()
  )

abstain_top10

```

Countries with the most Abstain Votes

Top 10



Determine the Least Agreeable Countries

```

least_agreeable_top10 <- unvotes %>%
  count(country, vote) %>%
  filter(vote == "no") %>%
  arrange(desc(n)) %>%

```

```

slice(1:10) %>%
ggplot(aes(n, fct_reorder (country, n), label = n)) +
geom_col(fill = "skyblue") +
geom_text(hjust = 1.3) +

labs(x = "", y = "",
      title = "Top 10 Least Agreeable Countries",
      subtitle = "Countries that vote 'No' the most") +

theme_ipsum_ps() +

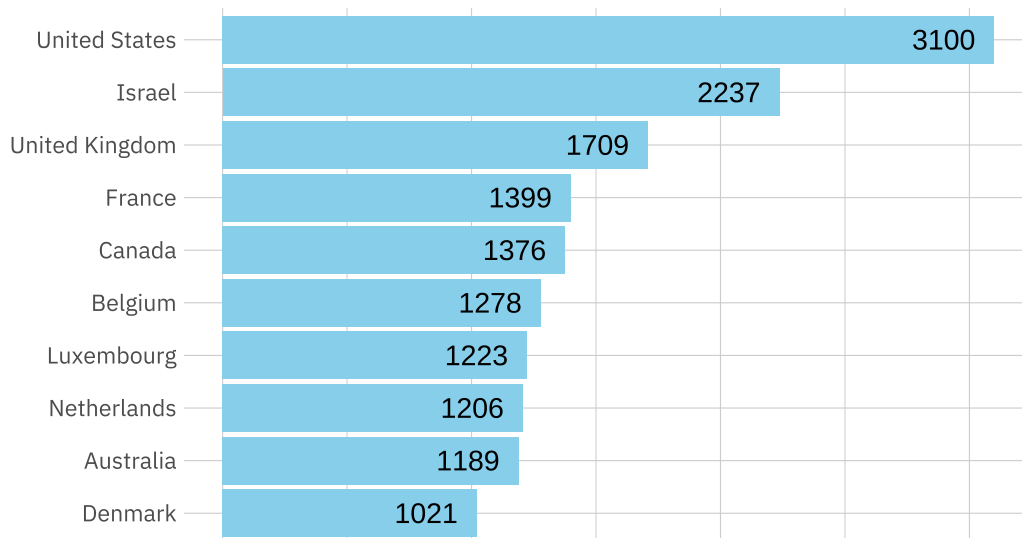
theme(
  plot.title = element_text(family = "IBMPlexSans", face = "bold"),
  axis.title.x=element_blank(),
  axis.text.x=element_blank(),
  axis.ticks.x=element_blank()
)

least_agreeable_top10

```

Top 10 Least Agreeable Countries

Countries that vote 'No' the most



Determine the most Agreeable Countries

```

most_agreeable_top10 <- unvotes %>%
  count(country, vote) %>%
  filter(vote == "yes") %>%
  # arrange(desc(n)) %>%
  # slice(1:10) %>%
  top_n(10) %>% #Use top_n to replace arrange and slice
ggplot(aes(n, fct_reorder (country, n), label = n)) +
geom_col(fill = "skyblue") +
geom_text(hjust = 1.3) +

```

```

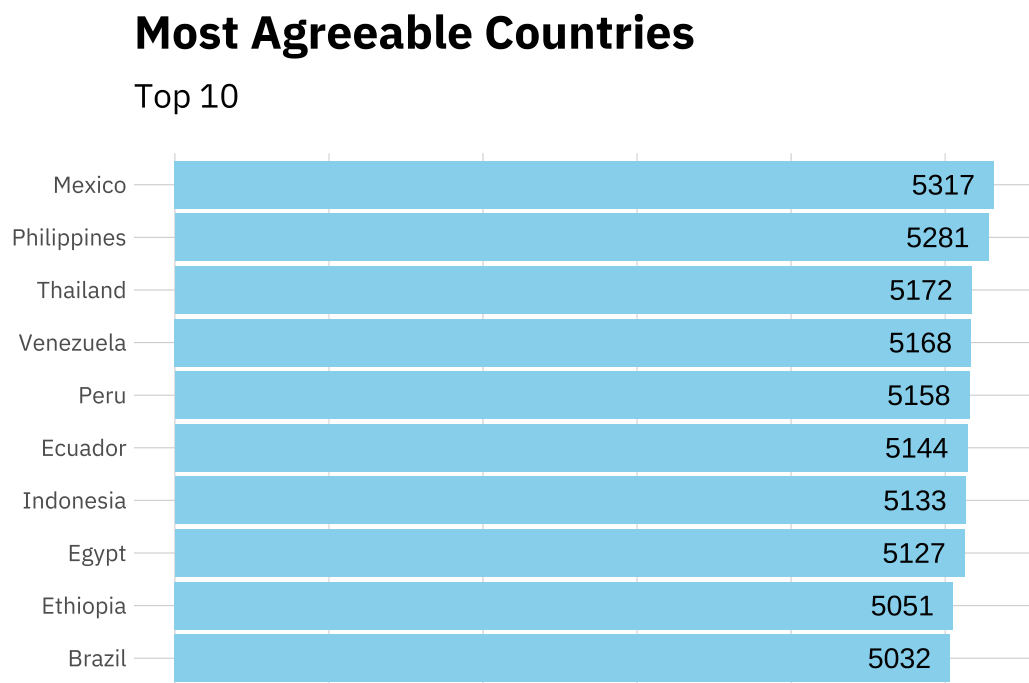
labs(x = "", y = "",
     title = "Most Agreeable Countries",
     subtitle = "Top 10") +

theme_ipsum_ps() +

theme(
  plot.title = element_text(family = "IBMPlexSans", face = "bold"),
  axis.title.x=element_blank(),
  axis.text.x=element_blank(),
  axis.ticks.x=element_blank()
)

most_agreeable_top10

```

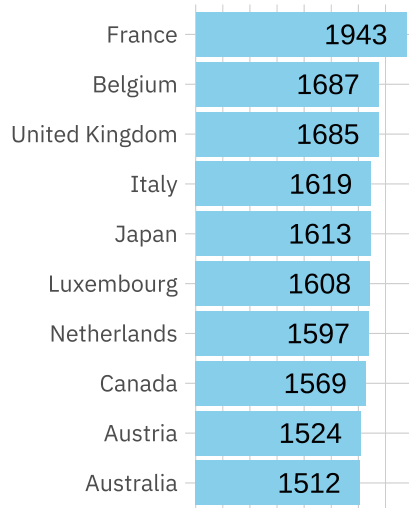


Combining all 3 plots

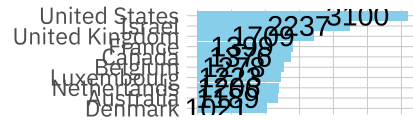
```
abstain_top10 | least_agreeable_top10 / most_agreeable_top10
```

Countries with the most Absentee Votes

Top 10

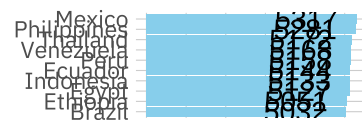


Countries that vote 'N'



Most Agreeable

Top 10



Joining All Datasets

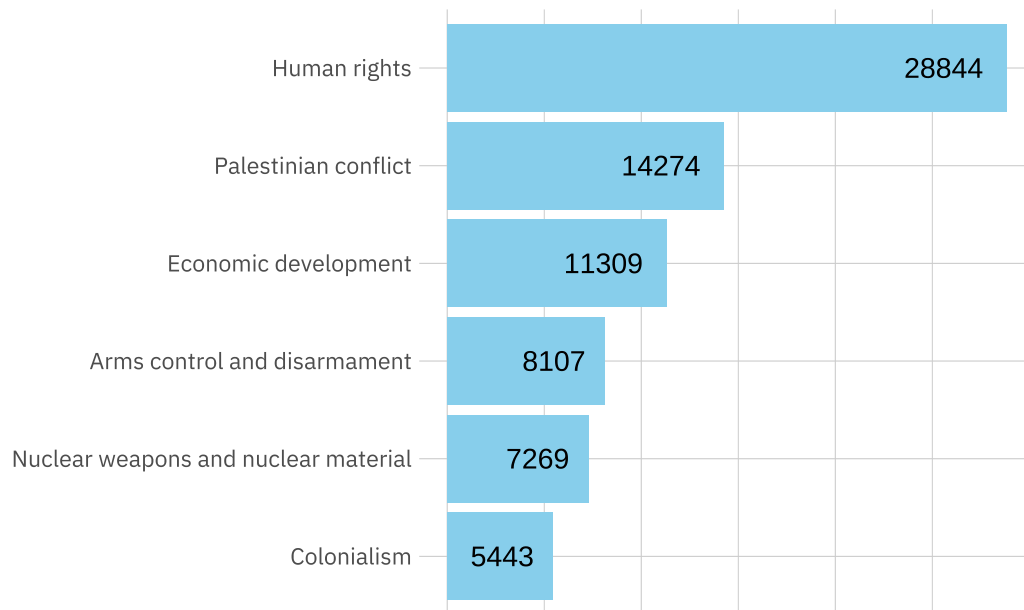
```
combined_dataset <- unvotes %>%
  inner_join(issues, by = "rcid") %>%
  inner_join(roll_calls, by = "rcid")
```

What Issues Drive Important Votes

```
combined_dataset %>%
  filter(importantvote == 1) %>%
  count(issue) %>%
  ggplot(aes(n, fct_reorder(issue, n), label = n)) +
  geom_col(fill = "skyblue") +
  geom_text(hjust = 1.3) +
  labs(x = "", y = "",
       title = "Issues that Dominate Important Vote Gatherings")
)+
theme_ipsum_ps() +

theme(
  plot.title = element_text(family = "IBMPlexSans", face = "bold"),
  axis.title.x=element_blank(),
  axis.text.x=element_blank(),
  axis.ticks.x=element_blank()
)
```

Issues that Dominate Important

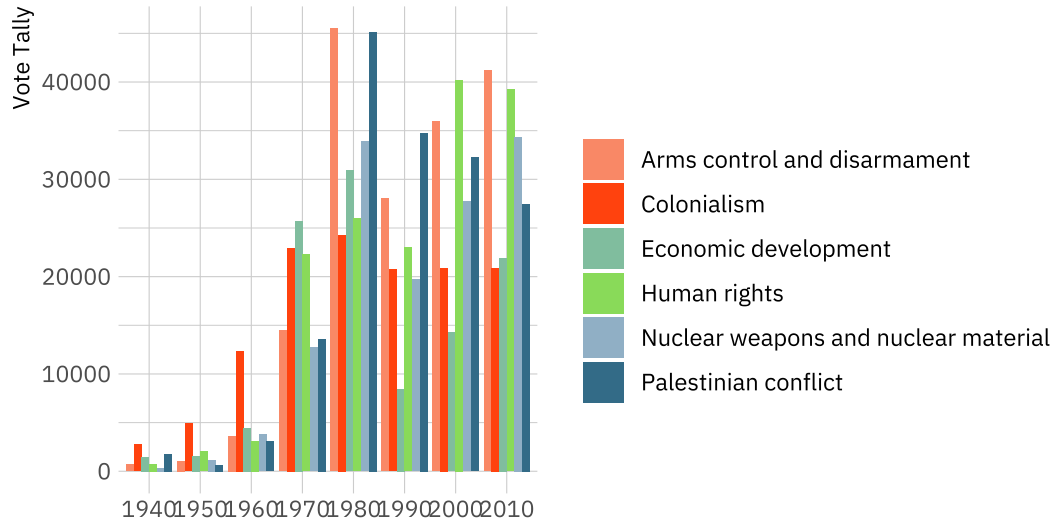


How has category of issues voted on changed since 1940

```
combined_dataset %>%
  mutate(year = year(date),
         year = factor(year - year %% 10 )) %>%
  count(year, issue) %>%
  ggplot(aes(year, n, fill = issue)) +
  geom_col(position = "dodge") +
  labs(x = "",
       y = "Vote Tally",
       fill = "",
       title = "Busy 1980s",
       subtitle = "The UN was terribly busy in the 1980s as there was an escalation in Arms Control") +
  scale_fill_manual(values = c("#f98866", "#ff420e", "#80bd9e", "#89da59", "#90afc5", "#336b87")) +
  theme_ipsum_ps() +
  theme(
    plot.title = element_text(family = "IBMPlexSans", face = "bold"),
  )
```

Busy 1980s

The UN was terribly busy in the 1980s as there was an escalation in ,



How often does USA, China and Russia agree or disagree

```
## # A tibble: 16,132 x 14
##   rcid country   country_code vote short_name issue session importantvote
##   <dbl> <chr>     <chr>         <chr> <chr>      <chr>      <dbl>      <dbl>
## 1      6 United S~ US          no  hr        Human ri~      1          0
## 2      6 Russia    RU          no  hr        Human ri~      1          0
## 3      8 United S~ US          no  ec        Economic~      1          0
## 4      8 Russia    RU          yes ec        Economic~      1          0
## 5     11 United S~ US          yes co        Colonial~      1          0
## 6     11 United S~ US          yes ec        Economic~      1          0
## 7     11 Russia    RU          yes co        Colonial~      1          0
## 8     11 Russia    RU          yes ec        Economic~      1          0
## 9     18 United S~ US          no  ec        Economic~      1          0
## 10    18 Russia    RU          yes ec        Economic~      1          0
## # ... with 16,122 more rows, and 6 more variables: date <date>, unres <chr>,
## #   amend <dbl>, para <dbl>, short <chr>, descr <chr>
```

Sarina Singh Khaira's Analysis

https://github.com/sarinasinghkhaira/tidy_tuesday/blob/main/2021-03-23_UN_Votes/UN_votes_.plot.Rmd

Generate A world Map

```
#plot proportion of yes votes by country as a chloropleth
```

```
## Simple feature collection with 177 features and 63 fields
## geometry type:  MULTIPOLYGON
## dimension:      XY
## bbox:           xmin: -180 ymin: -90 xmax: 180 ymax: 83.64513
## geographic CRS: WGS 84
## First 10 features:
##   scalerank   featurecla labelrank   sovereignty sov_a3 adm0_dif
```

## 0	1 Admin-0 country	3	Afghanistan	AFG	0
## 1	1 Admin-0 country	3	Angola	AGO	0
## 2	1 Admin-0 country	6	Albania	ALB	0
## 3	1 Admin-0 country	4	United Arab Emirates	ARE	0
## 4	1 Admin-0 country	2	Argentina	ARG	0
## 5	1 Admin-0 country	6	Armenia	ARM	0
## 6	1 Admin-0 country	4	Antarctica	ATA	0
## 7	3 Admin-0 country	6	France	FR1	1
## 8	1 Admin-0 country	2	Australia	AU1	1
## 9	1 Admin-0 country	4	Austria	AUT	0
##	level	type	admin	adm0_a3	geou_dif
## 0	2 Sovereign country		Afghanistan	AFG	0
## 1	2 Sovereign country		Angola	AGO	0
## 2	2 Sovereign country		Albania	ALB	0
## 3	2 Sovereign country		United Arab Emirates	ARE	0
## 4	2 Sovereign country		Argentina	ARG	0
## 5	2 Sovereign country		Armenia	ARM	0
## 6	2 Indeterminate		Antarctica	ATA	0
## 7	2 Dependency	French Southern and Antarctic Lands	ATF		0
## 8	2 Country		Australia	AUS	0
## 9	2 Sovereign country		Austria	AUT	0
##		geounit	gu_a3	su_dif	
## 0		Afghanistan	AFG	0	
## 1		Angola	AGO	0	
## 2		Albania	ALB	0	
## 3		United Arab Emirates	ARE	0	
## 4		Argentina	ARG	0	
## 5		Armenia	ARM	0	
## 6		Antarctica	ATA	0	
## 7		French Southern and Antarctic Lands	ATF	0	
## 8		Australia	AUS	0	
## 9		Austria	AUT	0	
##		subunit	su_a3	brk_diff	name
## 0		Afghanistan	AFG	0	Afghanistan
## 1		Angola	AGO	0	Angola
## 2		Albania	ALB	0	Albania
## 3		United Arab Emirates	ARE	0	United Arab Emirates
## 4		Argentina	ARG	0	Argentina
## 5		Armenia	ARM	0	Armenia
## 6		Antarctica	ATA	0	Antarctica
## 7		French Southern and Antarctic Lands	ATF	0	Fr. S. Antarctic Lands
## 8		Australia	AUS	0	Australia
## 9		Austria	AUT	0	Austria
##		name_long	brk_a3		brk_name
## 0		Afghanistan	AFG		Afghanistan
## 1		Angola	AGO		Angola
## 2		Albania	ALB		Albania
## 3		United Arab Emirates	ARE		United Arab Emirates
## 4		Argentina	ARG		Argentina
## 5		Armenia	ARM		Armenia
## 6		Antarctica	ATA		Antarctica
## 7		French Southern and Antarctic Lands	ATF		Fr. S. and Antarctic Lands
## 8		Australia	AUS		Australia
## 9		Austria	AUT		Austria
##	brk_group	abbrev	postal		
## 0	<NA>	Afg.	AF		
## 1	<NA>	Ang.	AO		
## 2	<NA>	Alb.	AL		


```

## 6      NA      <NA>      AQ      ATA      010 <NA> <NA> <NA>      NA      ATA
## 7      NA      <NA>      TF      ATF      260 <NA> <NA> <NA>      NA      ATF
## 8      NA      <NA>      AU      AUS      036 036      AU      AUS      NA      AUS
## 9      NA      <NA>      AT      AUT      040 040      AT      AUT      NA      AUT
##      adm0_a3_us adm0_a3_un adm0_a3_wb      continent
## 0      AFG      NA      NA      Asia
## 1      AGO      NA      NA      Africa
## 2      ALB      NA      NA      Europe
## 3      ARE      NA      NA      Asia
## 4      ARG      NA      NA      South America
## 5      ARM      NA      NA      Asia
## 6      ATA      NA      NA      Antarctica
## 7      ATF      NA      NA      Seven seas (open ocean)
## 8      AUS      NA      NA      Oceania
## 9      AUT      NA      NA      Europe
##      region_un      subregion      region_wb
## 0      Asia      Southern Asia      South Asia
## 1      Africa      Middle Africa      Sub-Saharan Africa
## 2      Europe      Southern Europe      Europe & Central Asia
## 3      Asia      Western Asia      Middle East & North Africa
## 4      Americas      South America      Latin America & Caribbean
## 5      Asia      Western Asia      Europe & Central Asia
## 6      Antarctica      Antarctica      Antarctica
## 7      Seven seas (open ocean)      Seven seas (open ocean)      Sub-Saharan Africa
## 8      Oceania      Australia and New Zealand      East Asia & Pacific
## 9      Europe      Western Europe      Europe & Central Asia
##      name_len long_len abbrev_len tiny homepart      geometry
## 0      11      11      4      NA      1 MULTIPOLYGON (((61.21082 35...
## 1      6      6      4      NA      1 MULTIPOLYGON (((16.32653 -5...
## 2      7      7      4      NA      1 MULTIPOLYGON (((20.59025 41...
## 3      20      20      6      NA      1 MULTIPOLYGON (((51.57952 24...
## 4      9      9      4      NA      1 MULTIPOLYGON (((-65.5 -55.2...
## 5      7      7      4      NA      1 MULTIPOLYGON (((43.58275 41...
## 6      10      10      4      NA      1 MULTIPOLYGON (((-59.57209 -...
## 7      22      35      10      2      NA MULTIPOLYGON (((68.935 -48....
## 8      9      9      4      NA      1 MULTIPOLYGON (((145.398 -40...
## 9      7      7      5      NA      1 MULTIPOLYGON (((16.97967 48...

```

Text Analysis

Pick out the keywords from the UN resolutions within each issue by calculating tf-idf

Combine plots using patchwork

UN General Assembly Resolutions Since 1970

Using historical UN General Assembly Resolutions data, this visualisation shows the number of resolutions related to each issue over time, the keywords in those resolutions, and the proportion of resolutions each country voted "yes" for.

