

How to make a Gantt diagram with ggplot

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Import data

```
library(tidyverse)
library(lubridate)

data <- read_csv("SI_InequalityCities.csv") |>
  mutate(start = ymd(paste0(start,"01-01")),
         end = ymd(paste0(end,"01-01"))) |>
  arrange(desc(end))

head(data)

## # A tibble: 6 x 4
##   author      start      end      typineq
##   <chr>      <date>    <date>    <chr>
## 1 Cohen      2022-01-01 2023-01-01 inequality
## 2 Ubareviciene 2011-01-01 2021-01-01 disparity
## 3 Verma      2019-01-01 2021-01-01 inequality
## 4 Iyer       2020-01-01 2021-01-01 inequality
## 5 Arbit      2019-01-01 2020-01-01 disparity
## 6 Ermagun    2019-01-01 2020-01-01 inequality
```

Transform into long format

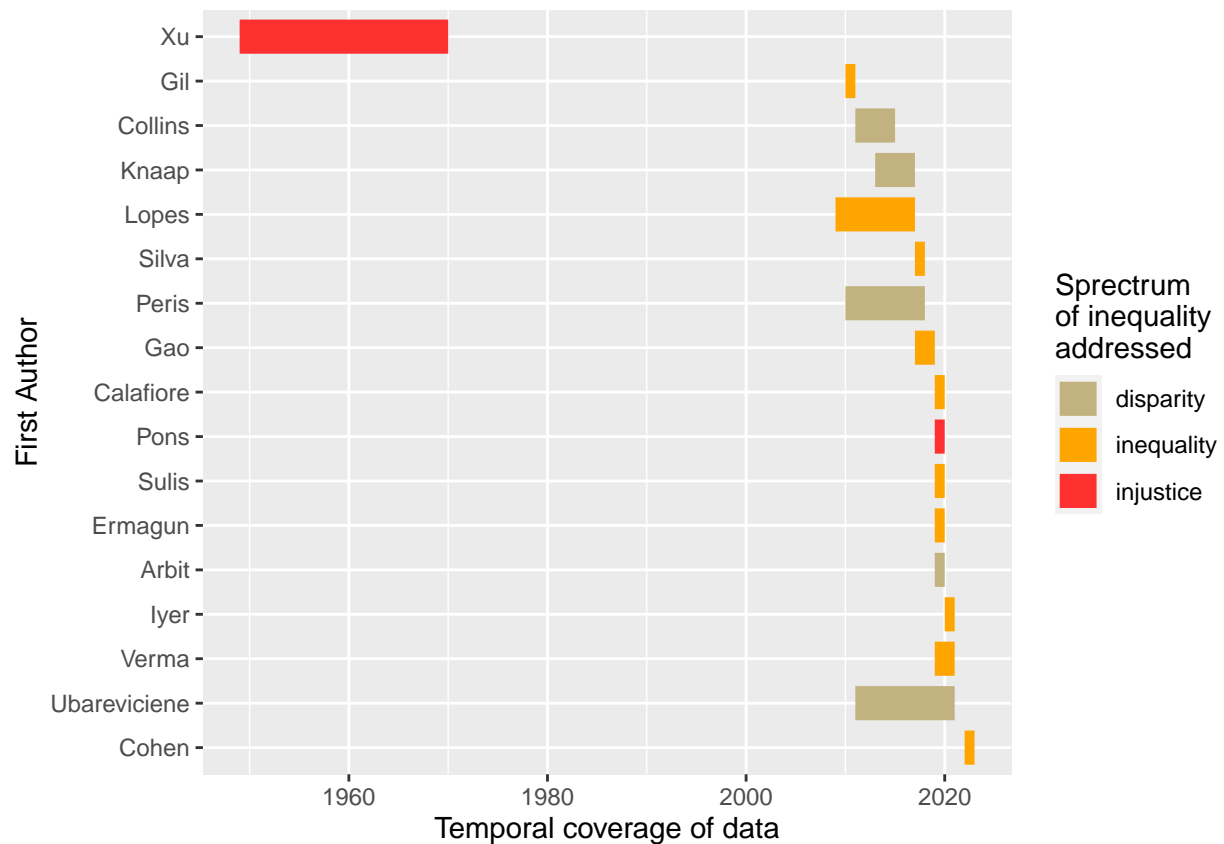
```
data_long <- data |>
  pivot_longer(cols=c("start", "end"),
               names_to="date_type",
               values_to = "date")

head(data_long)

## # A tibble: 6 x 4
##   author      typineq  date_type date
##   <chr>      <chr>    <chr>    <date>
## 1 Cohen      inequality start    2022-01-01
## 2 Cohen      inequality end      2023-01-01
## 3 Ubareviciene disparity start    2011-01-01
## 4 Ubareviciene disparity end      2021-01-01
## 5 Verma      inequality start    2019-01-01
## 6 Verma      inequality end      2021-01-01
```

Create Gantt diagram

```
ggplot(data_long, aes(x=fct_inorder(author), y=date, colour=typineq)) +  
  geom_line(size=6) + labs(colour = "Spectrum \nof inequality \naddressed") +  
  scale_colour_manual(values = c("#C2B280", "orange", "firebrick1")) +  
  ylab("Temporal coverage of data") + xlab("First Author") +  
  coord_flip()
```



Source: parts of the code come from this tutorial: <https://jtr13.github.io/cc19/gantt-charts.html>