

Tidy Tuesday - Week 1

Grace Hu

20/02/2021

Task at hand

For this week, I will be looking at the #DuBoisChallenge taken from [here](#). I would like to complete challenges 1 and 3.

Challenge 01

Comparative Increase of White and Colored Population in Georgia

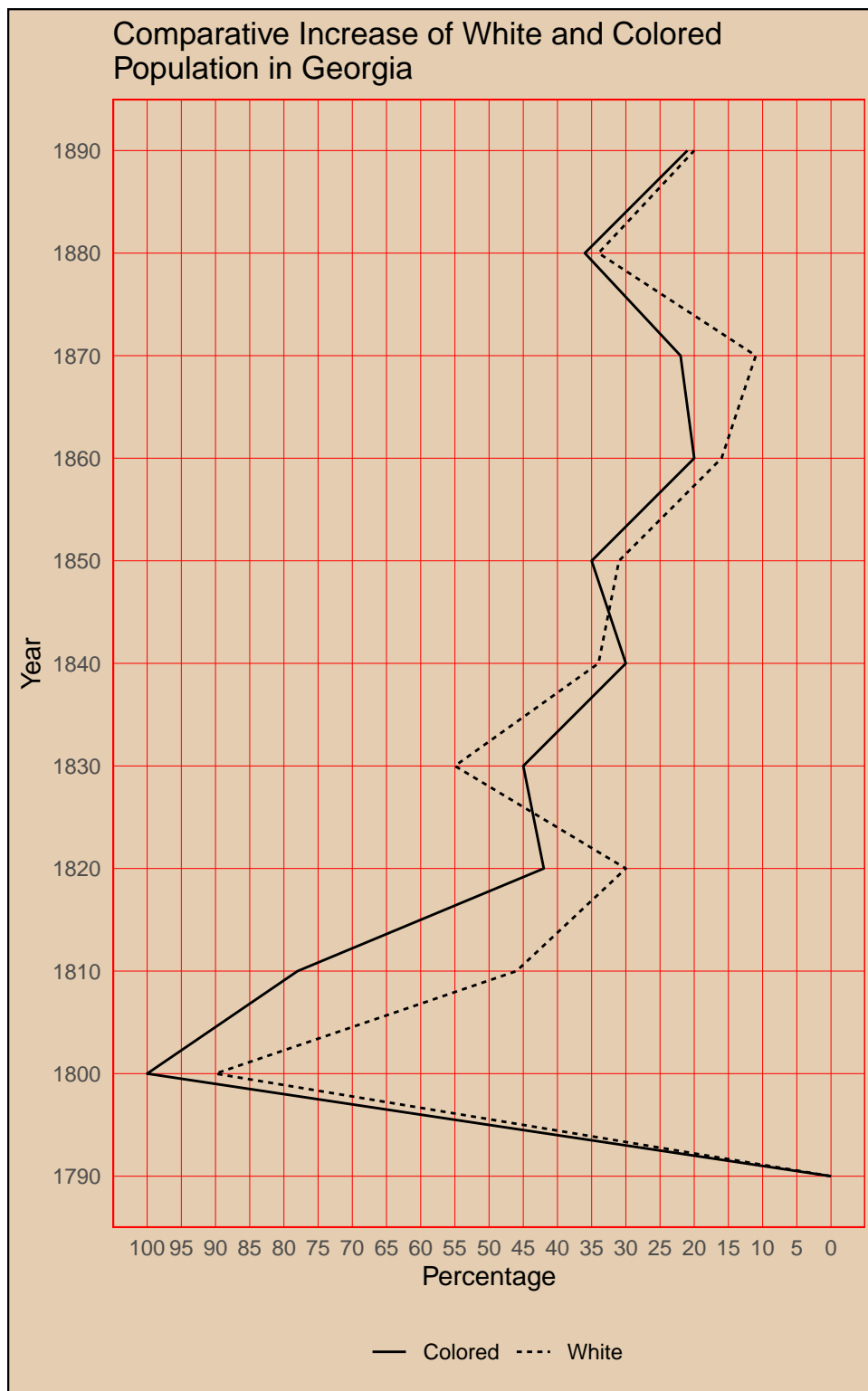
Data Wrangling

```
georgia_pop <- georgia_pop_raw %>%  
  pivot_longer(!Year, names_to = "Group", values_to = "Percentage") %>%  
  mutate(Group = as_factor(Group))
```

Data Visualization

```
options(repr.plot.width=500, repr.plot.height=800)  
  
ggplot(data = georgia_pop, aes(x = Year, y = Percentage, group = Group)) +  
  geom_line(aes(linetype = Group)) +  
  scale_x_continuous(breaks = seq(1790, 1890, by = 10)) +  
  scale_y_reverse(breaks = seq(0, 100, by = 5)) +  
  labs(  
    title = "Comparative Increase of White and Colored\nPopulation in Georgia",  
    xlab = "Year",  
    ylab = "Percentage"  
  ) +  
  theme_minimal() +  
  theme(  
    legend.title = element_blank(),  
    panel.border = element_rect(colour = "red", fill = NA),  
    panel.grid.major = element_line(size = 0.1, linetype = 'solid', colour = "red"),  
    panel.grid.minor = element_blank(),  
    legend.position = "bottom",  
    plot.background = element_rect(fill = "#e4cdeb"),
```

```
aspect.ratio = 3/2) +  
coord_flip()
```



Challenge 03

Occupations of Negroes and Whites in Georgia

Data Wrangling

```
occupation <- occupation_raw %>%  
  mutate(Group = as_factor(Group), Occupation = as_factor(Occupation))  
  
levels(occupation$Occupation)
```

```
## [1] "Agriculture, Fisheries and Mining"  
## [2] "Manufacturing and Mechanical Industries"  
## [3] "Domestic and Personal Service"  
## [4] "Professions"  
## [5] "Trade and Transportation"
```

```
ggplot(data = occupation, aes(x = Occupation, y = Percentage, fill = Group)) +  
  geom_bar(stat = "identity", position="dodge") +  
  scale_y_continuous(breaks = seq(0, 70, by=10), limits = c(0, 70)) +  
  scale_x_discrete(  
    labels = c("Agriculture,\nFisheries\nand Mining", "Manufacturing and\nMechanical\nIndustries", "Domestic and\nPersonal Service", "Professions", "Trade and\nTransportation")  
  ) +  
  theme_minimal() +  
  theme(legend.title = element_blank())
```

