

Exemplary Code Chunk

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I wrote this code as part of a problem set for my data analysis class (SIS 750) at the School of International Service at American University. The assignment was to replicate and then improve on Figure 2 from a paper by Keele et al. (2021). In this paper, Keele et al. (2021) evaluate the impact of efforts to disenfranchise African American voters in Louisiana in the 1950s and 1960s. They focus specifically on the Understanding Clause, which some parishes administered and others did not.

See the code and output for my improved plot below.

```
df %>%
  ggplot(aes(x = year, y = reg_rate, color = status, shape = status, linetype = status)) +
  facet_wrap(~ race) +
  geom_rect(aes(xmin=1954, xmax=1965, ymin=-Inf, ymax=Inf), color = 'white', fill = 'grey95')+
  geom_line(lwd = .7) +
  geom_point(color = 'black') +
  scale_shape_manual(values = c(16, 17)) +
  scale_color_manual(values = c('orange', 'turquoise3')) +
  scale_y_continuous(limits = c(0, 1),
                     labels = scales::label_percent()+
  guides(color = guide_legend(override.aes = list(size = 2))) +
  labs(x = 'Year', y = 'Registration Rate',
       title = 'FIGURE 2. Proportion of Registered Voters by Race and by Understanding Clause Status.',
       caption = 'Note: Treated parishes enforced the Understanding Clause and control parishes did not
  theme_minimal() +
  theme(legend.title = element_blank(),
        panel.grid = element_blank(),
        panel.border = element_rect(color = 'black', fill = NA),
        panel.spacing = unit(2, "lines"),
        axis.text = element_text(size = 11, color = 'black'),
        axis.title = element_text(size = 11),
        legend.text = element_text(size = 11),
        strip.text.x = element_text(size = 11, face = 'bold'),
        plot.title = element_text(face = 'bold', size = 14, hjust = 0),
        plot.caption = element_text(size = 11, hjust = 0, face = 'italic'))
```

FIGURE 2. Proportion of Registered Voters by Race and by Understanding Clause Status. Treated Parishes Enforced the Understanding Clause and Control Parishes Did Not

