

# Extras

Kieran Healy  
Duke University

April 17, 2024

**Extras**

# Load our packages

```
library(here)      # manage file paths
library(tidyverse) # your friend and mine
library(socviz)    # data and some useful functions
library(ggrepel)   # Text and labels
library(colorspace) # luminance-balanced palettes
library(scales)    # scale adjustments and enhancements
library(ggforce)   # useful enhancements to ggplot

## install.packages("gifski")
## install.packages("gganimate")

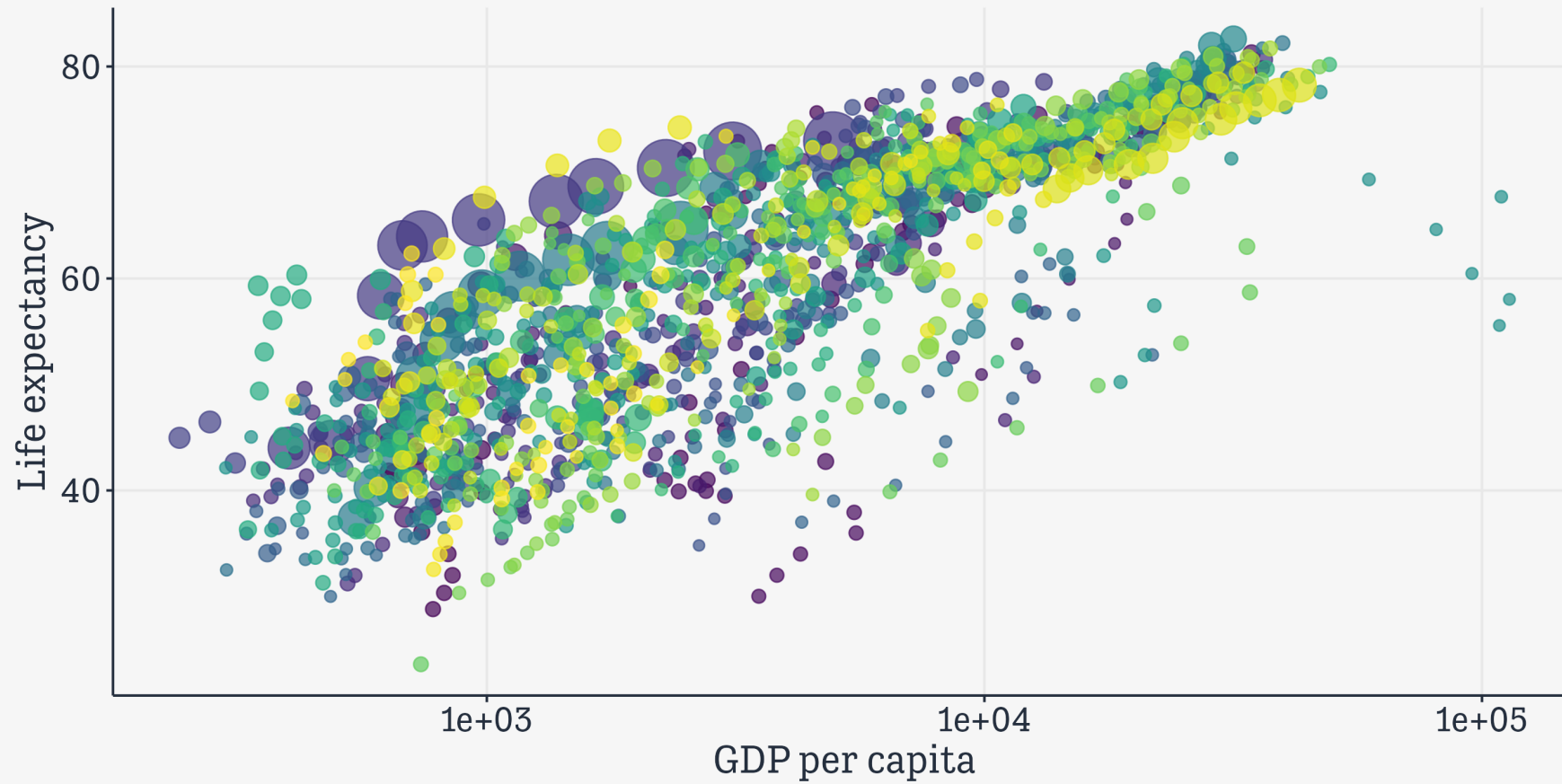
library(gapminder)
library(gganimate) # Animation
```

# Gapminder returns

```
p ← ggplot(data = gapminder,  
           mapping = aes(x = gdpPercap, y=lifeExp,  
                         size = pop, color = country)) +  
  geom_point(show.legend = FALSE, alpha = 0.7) +  
  scale_color_viridis_d() +  
  scale_size(range = c(2, 12)) +  
  scale_x_log10() +  
  labs(x = "GDP per capita", y = "Life expectancy")
```

p

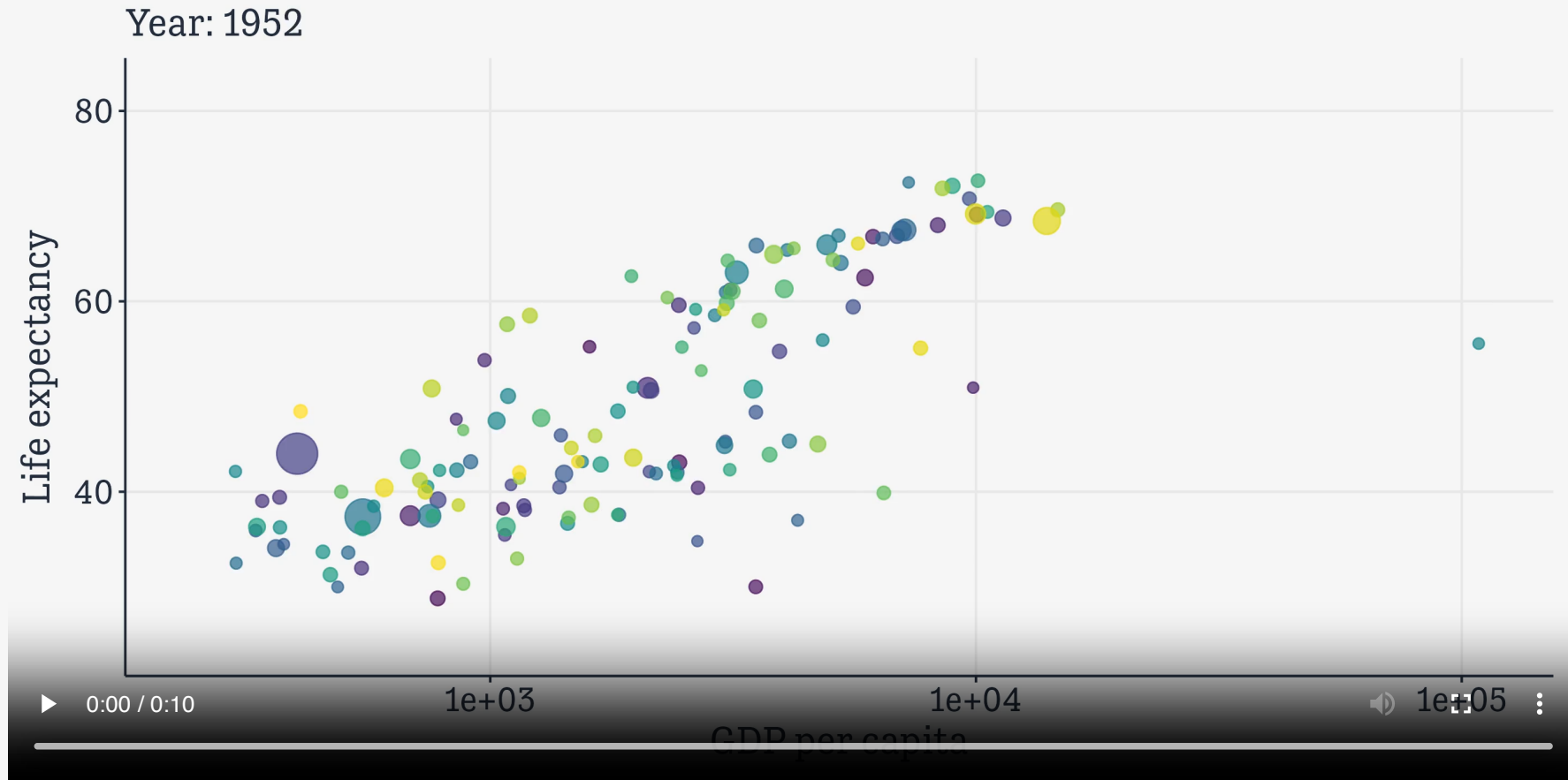
# Gapminder returns



# But add one thing

```
p_live ← p + transition_time(year) +  
  labs(title = "Year: {frame_time}")  
animate(p_live, renderer = ffmpeg_renderer())
```

# But add one thing



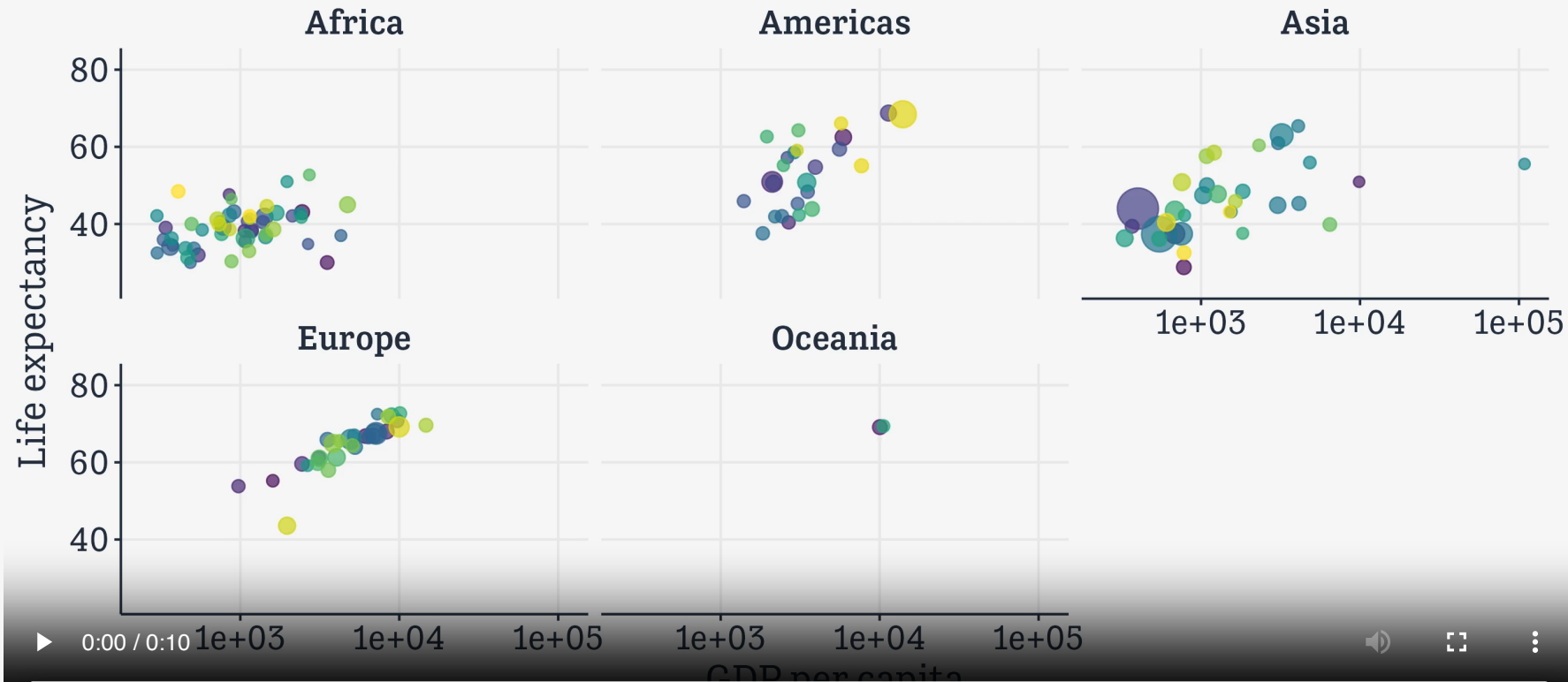
# Everything's Available

```
p_live2 ← p + facet_wrap(~ continent) +  
  transition_time(year) +  
  labs(title = "Year: {frame_time}")  
animate(p_live2, renderer = ffmpeg_renderer())
```



# Everything's Available

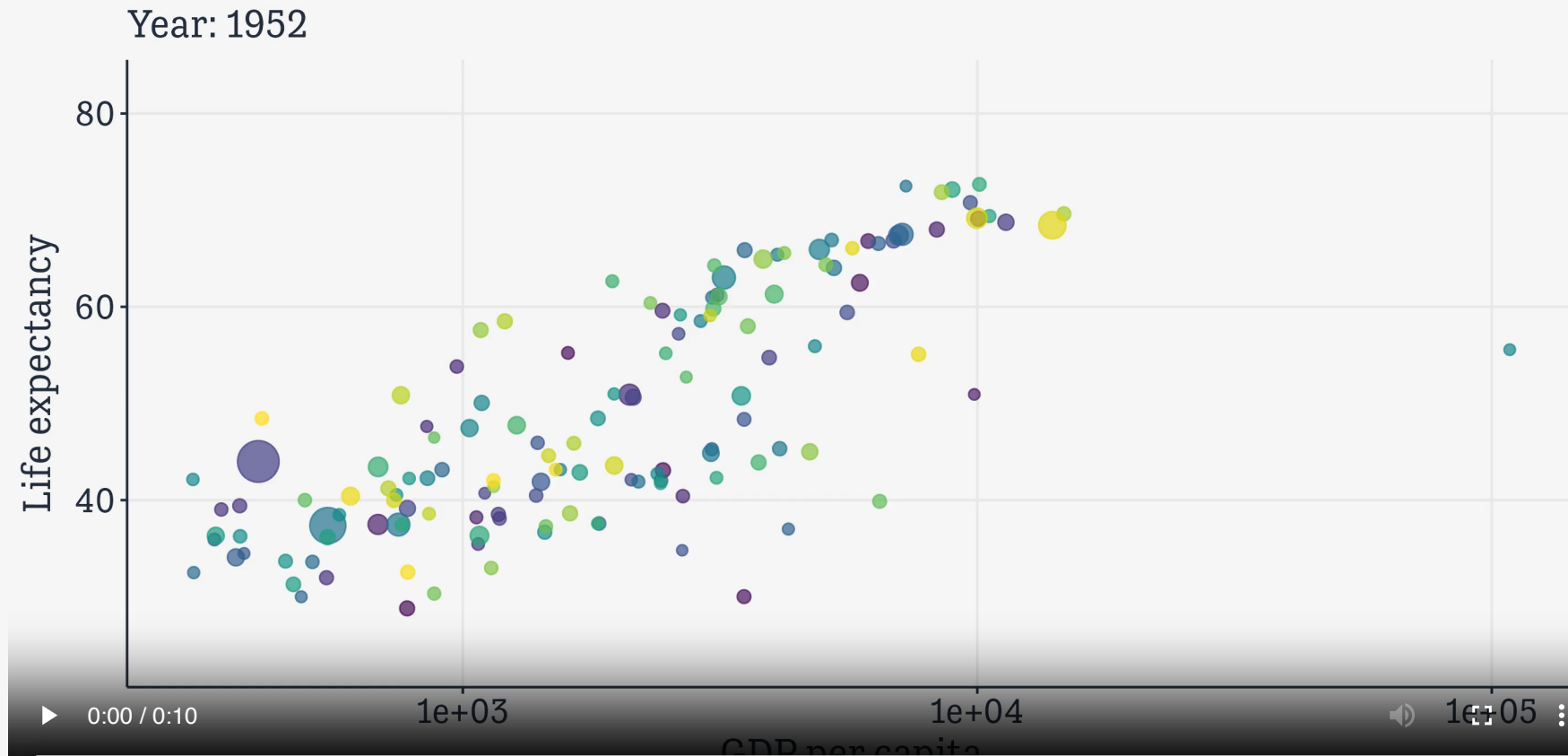
Year: 1952



# Lots of effects

```
p_live3 ← p + transition_time(year) +  
  labs(title = "Year: {frame_time}") +  
  view_follow(fixed_y = TRUE)  
  
animate(p_live3, renderer = ffmpeg_renderer())
```

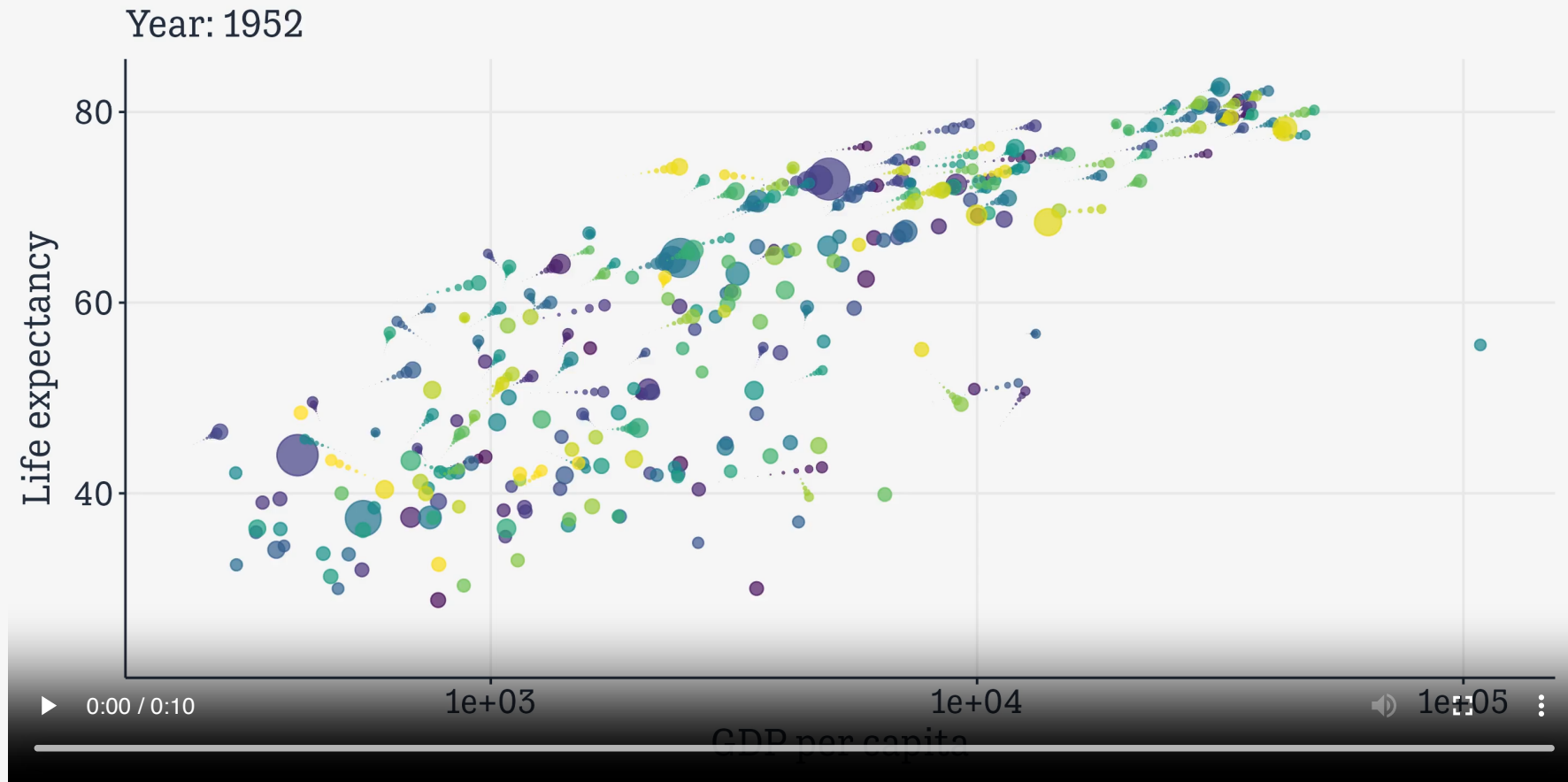
# Lots of effects



# Lots of effects

```
p_live4 ← p + transition_time(year) +  
  labs(title = "Year: {frame_time}") +  
  shadow_wake(wake_length = 0.1, alpha = FALSE)  
animate(p_live4, renderer = ffmpeg_renderer())
```

# Lots of effects

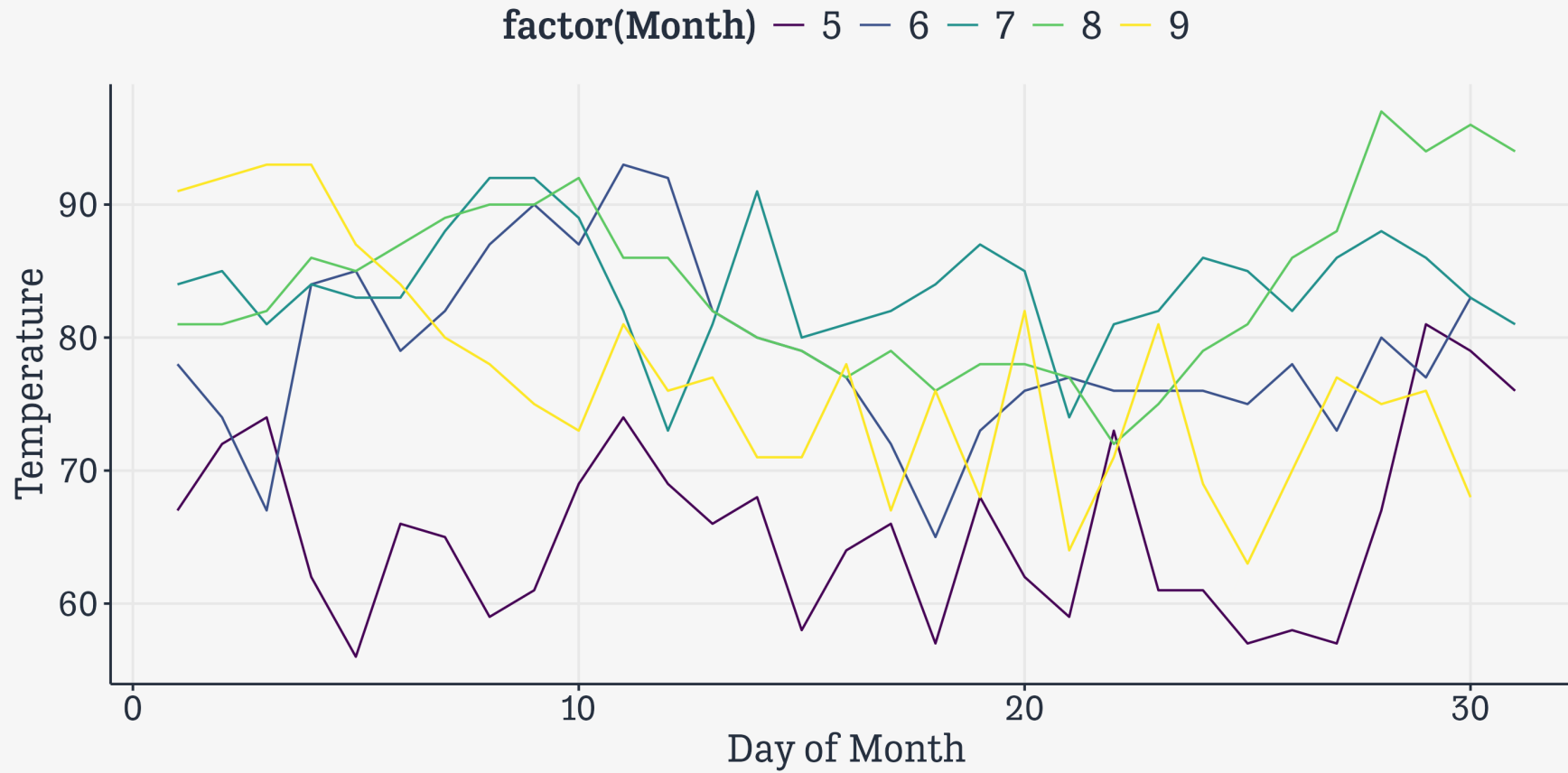


# Another Example

```
p ← ggplot(data = airquality,  
           mapping = aes(Day, Temp, group = Month,  
                         color = factor(Month))) +  
  geom_line() +  
  scale_color_viridis_d() +  
  labs(x = "Day of Month", y = "Temperature") +  
  theme(legend.position = "top")
```

p

# Another Example



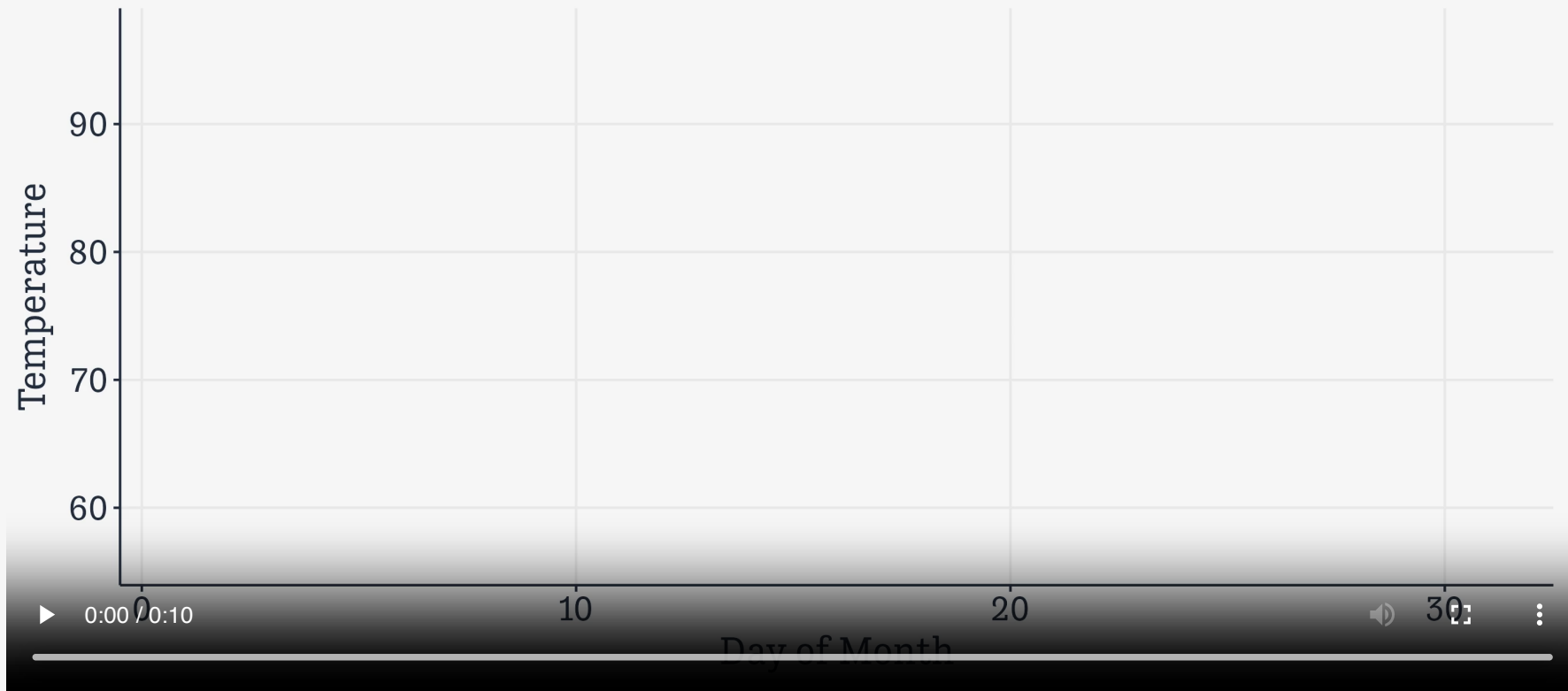
# Another Example

```
p_live6 ← p + transition_reveal(Day)  
animate(p_live6, renderer = ffmpeg_renderer())
```



# Another Example

factor(Month) — 5 — 6 — 7 — 8 — 9



# Another Example

```
p_live7 ← p + geom_point(aes(group = seq_along(Day))) +  
  transition_reveal(Day)  
animate(p_live7, renderer = ffmpeg_renderer())
```

# Another Example

