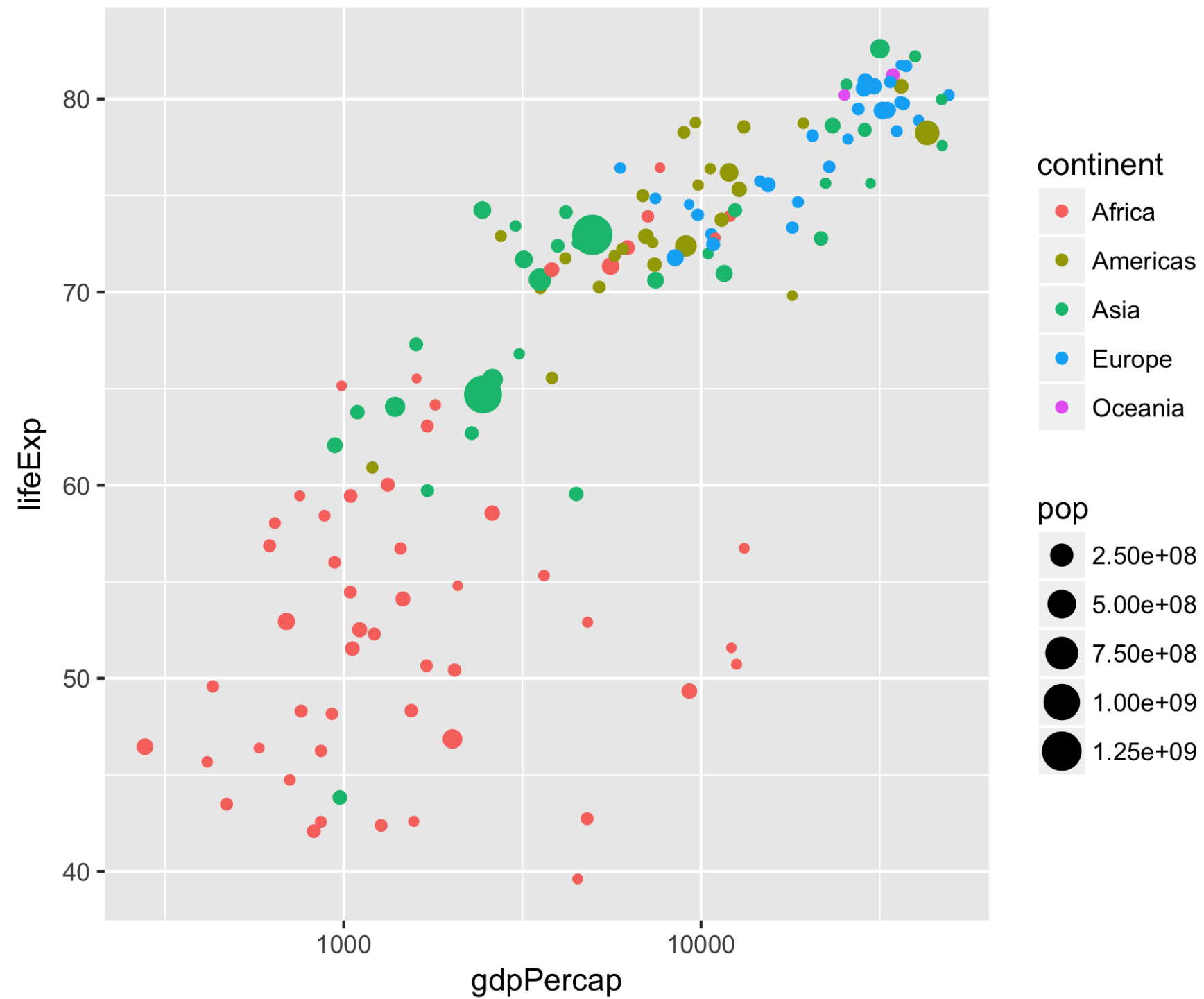


Visualizing with ggplot2

INTRODUCTION TO THE TIDYVERSE



David Robinson
Chief Data Scientist, DataCamp



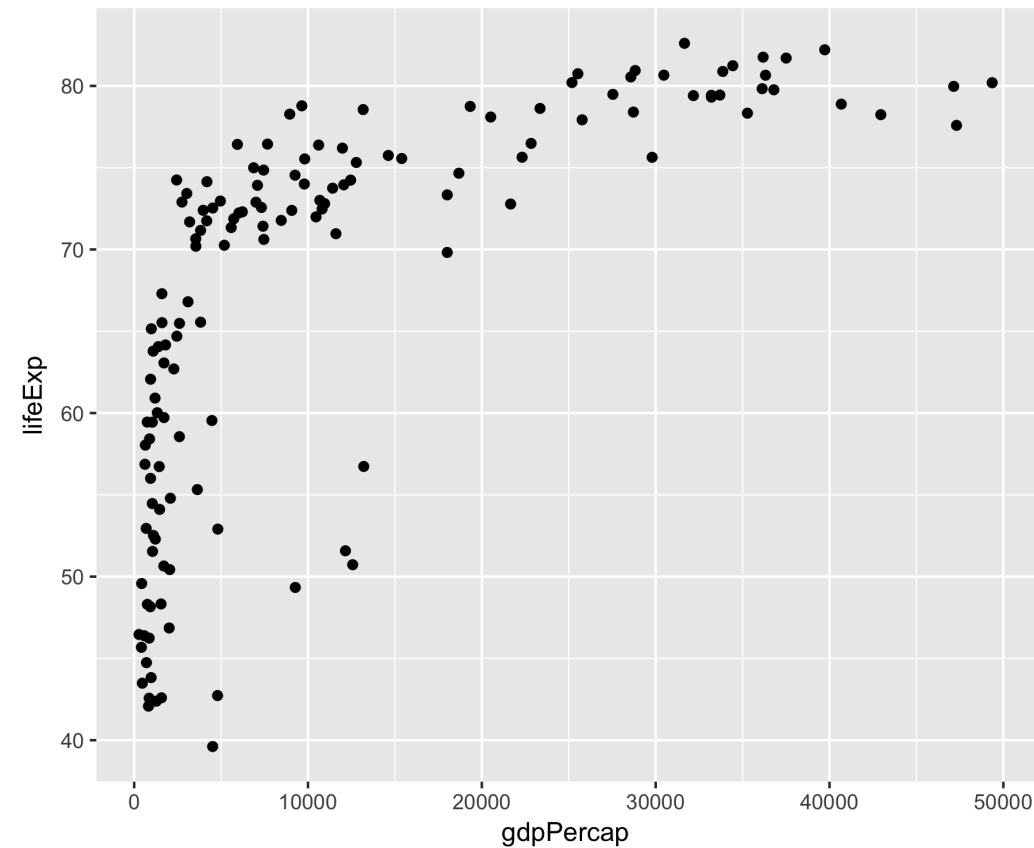
Variable Assignment

```
gapminder_2007 <- gapminder %>%  
  filter(year == 2007)
```

```
gapminder_2007
```

```
# A tibble: 142 x 6  
  country continent year lifeExp      pop gdpPercap  
  <fctr>    <fctr> <int>   <dbl>    <int>      <dbl>  
1 Afghanistan      Asia  2007  43.828 31889923  974.5803  
2  Albania      Europe  2007  76.423  3600523 5937.0295  
3  Algeria      Africa  2007  72.301 33333216 6223.3675  
4  Angola      Africa  2007  42.731 12420476 4797.2313  
5  Argentina  Americas  2007  75.320 40301927 12779.3796  
6  Australia  Oceania   2007  81.235 20434176 34435.3674  
7  Austria      Europe  2007  79.829  8199783 36126.4927  
8  Bahrain      Asia    2007  75.635   708573 29796.0483  
9  Bangladesh      Asia  2007  64.062 150448339 1391.2538  
10 Belgium      Europe  2007  79.441 10392226 33692.6051  
# ... with 132 more rows
```

Visualizing with ggplot2



```
library(ggplot2)
```

```
ggplot(gapminder_2007, aes(x = gdpPerCap, y = lifeExp)) +  
  geom_point()
```

Log scales

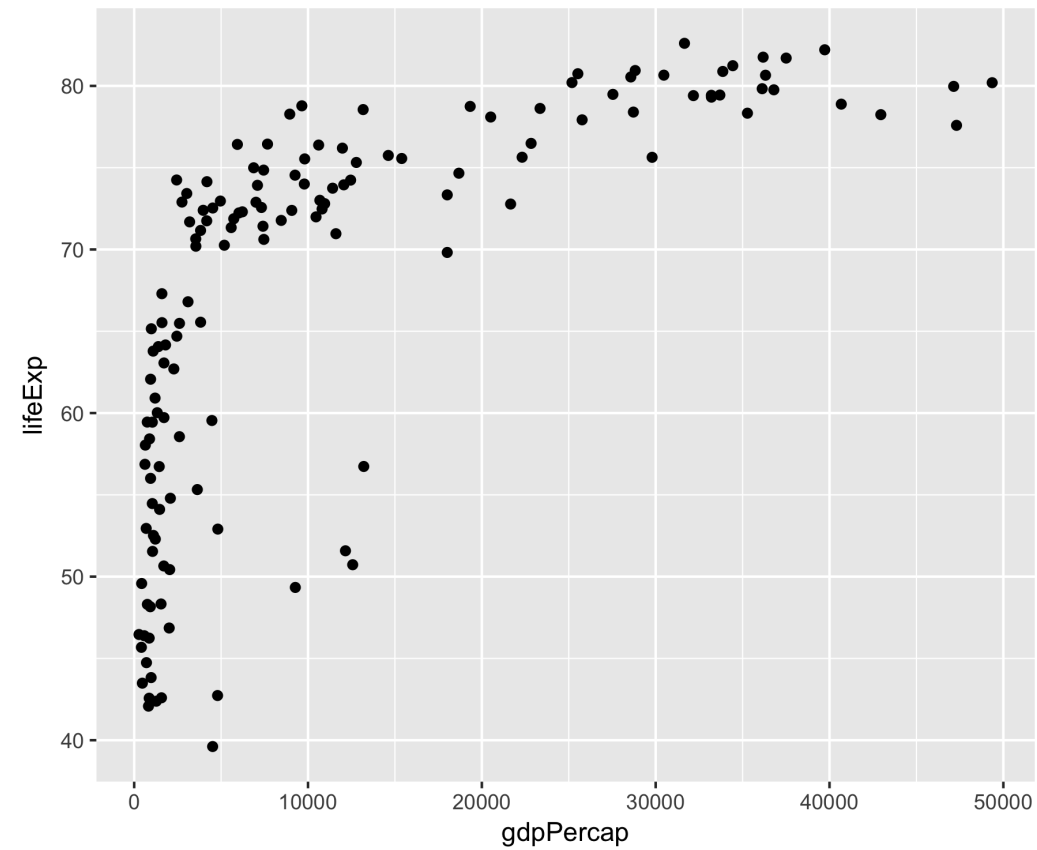
INTRODUCTION TO THE TIDYVERSE



David Robinson

Chief Data Scientist, DataCamp

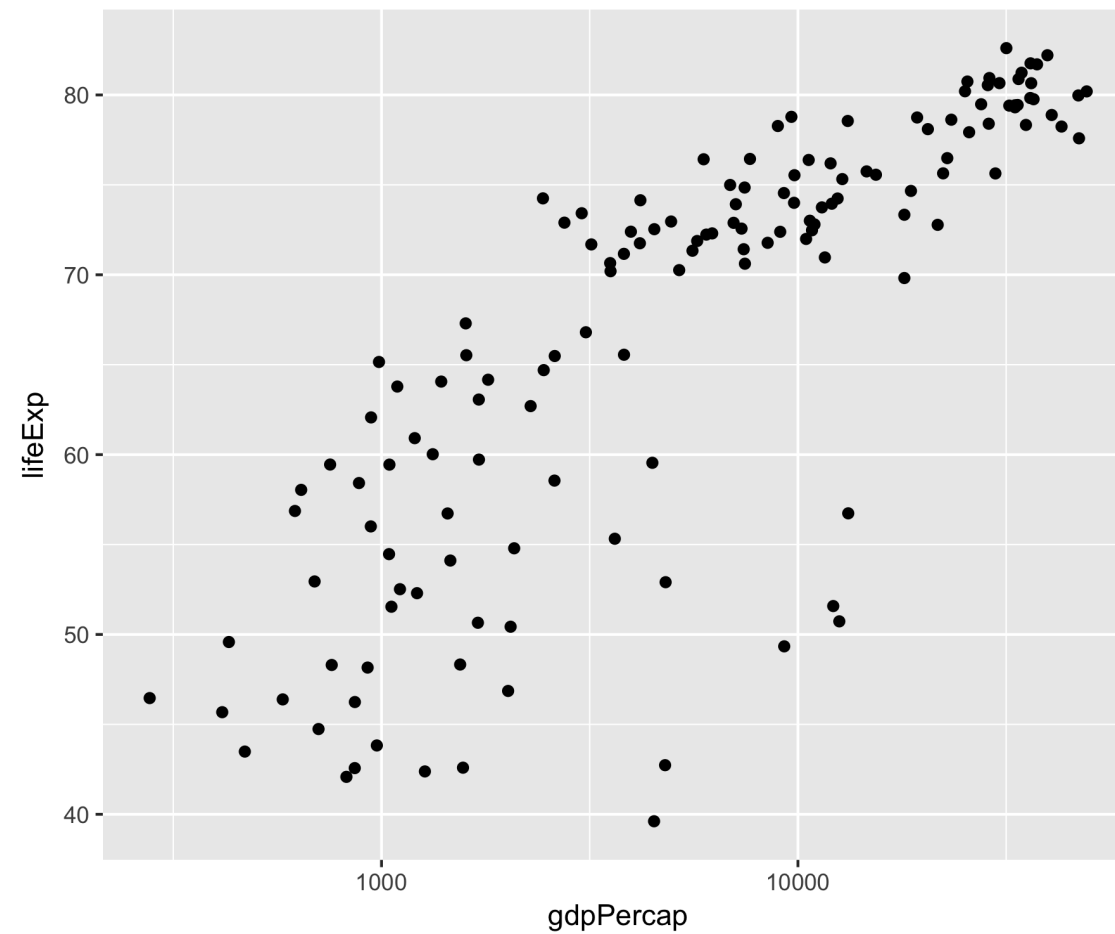
Scatter plot



```
library(ggplot2)
```

```
ggplot(gapminder, aes(x = gdpPerCap, y = lifeExp)) +  
  geom_point()
```

Log scale



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp)) +  
  geom_point() +  
  scale_x_log10()
```

Additional aesthetics

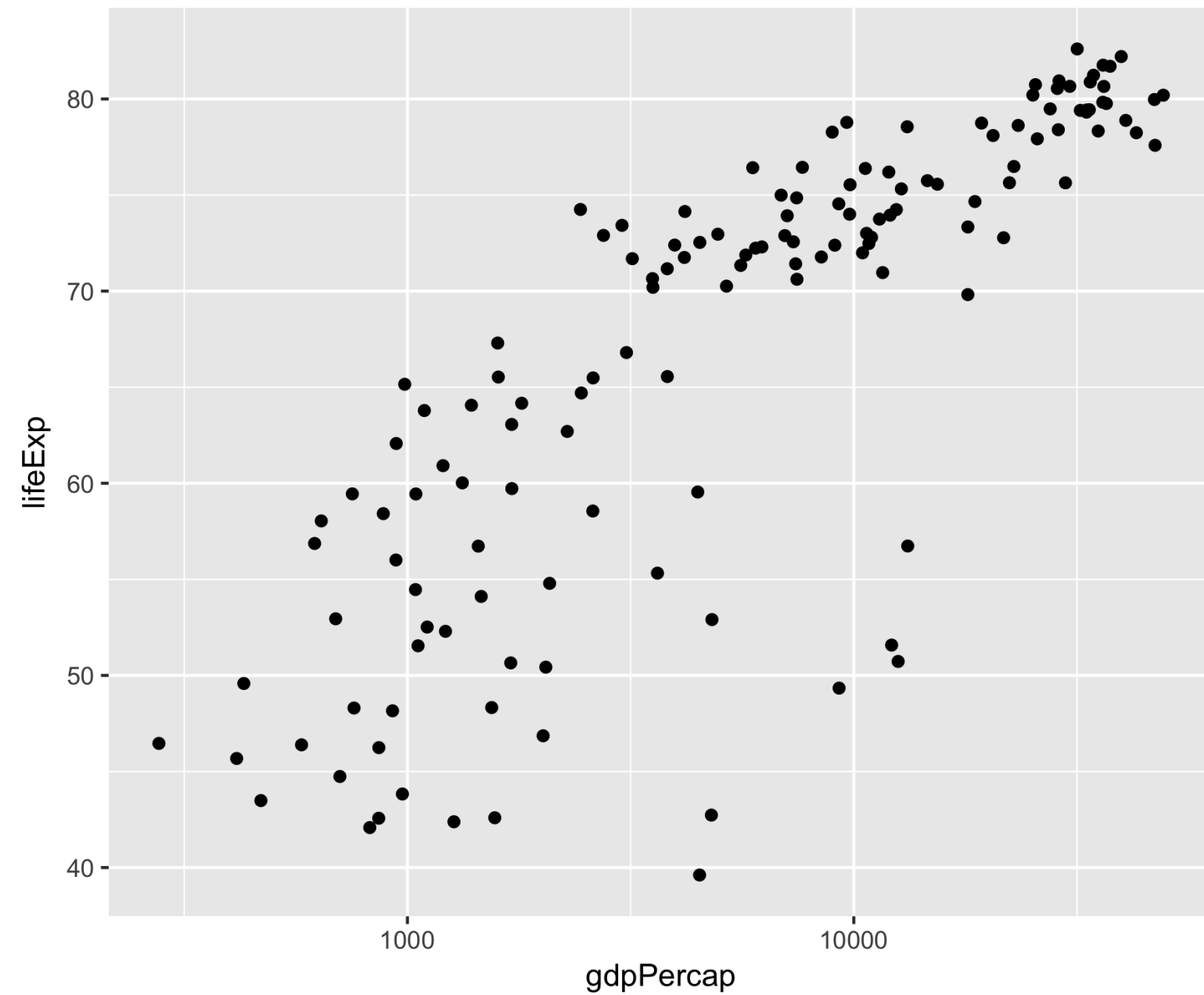
INTRODUCTION TO THE TIDYVERSE



David Robinson

Chief Data Scientist, DataCamp

Scatter plots

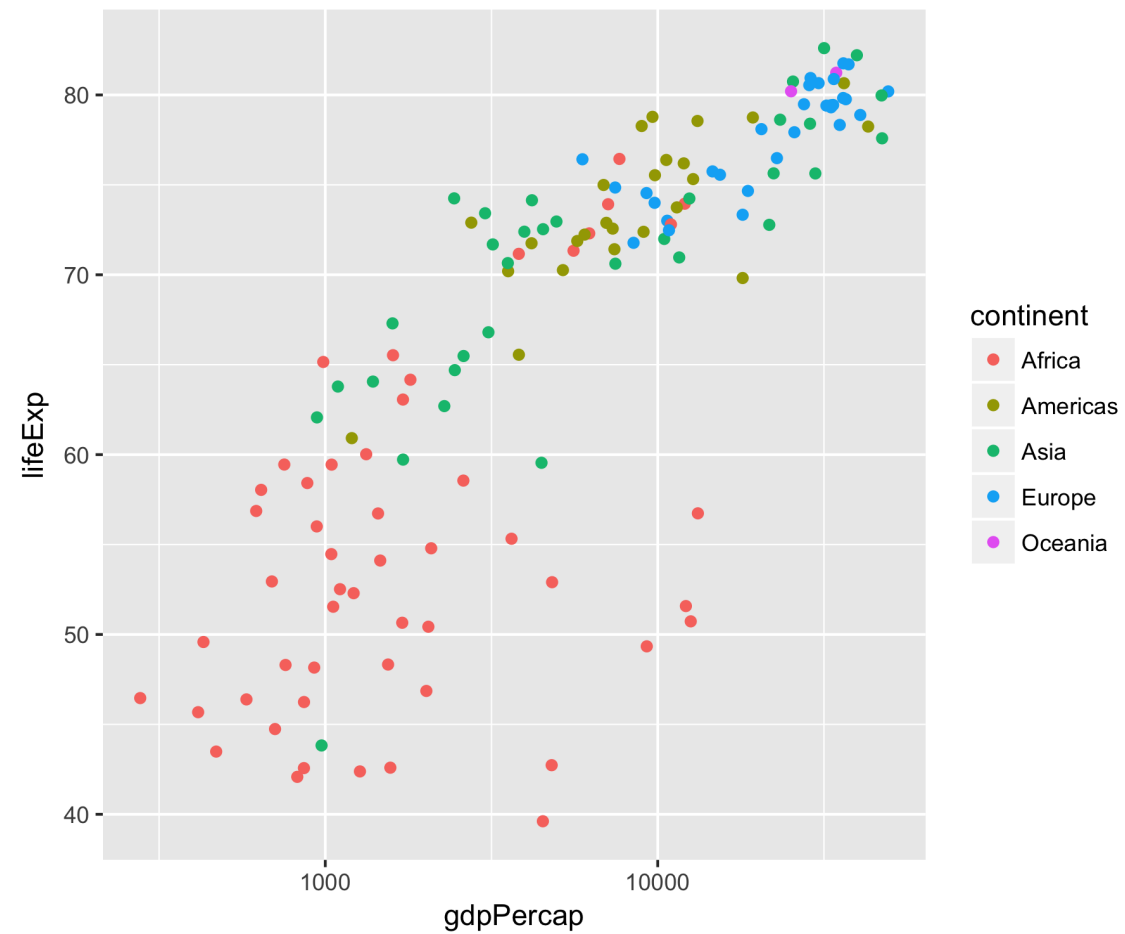


Additional variables

```
gapminder_2007
```

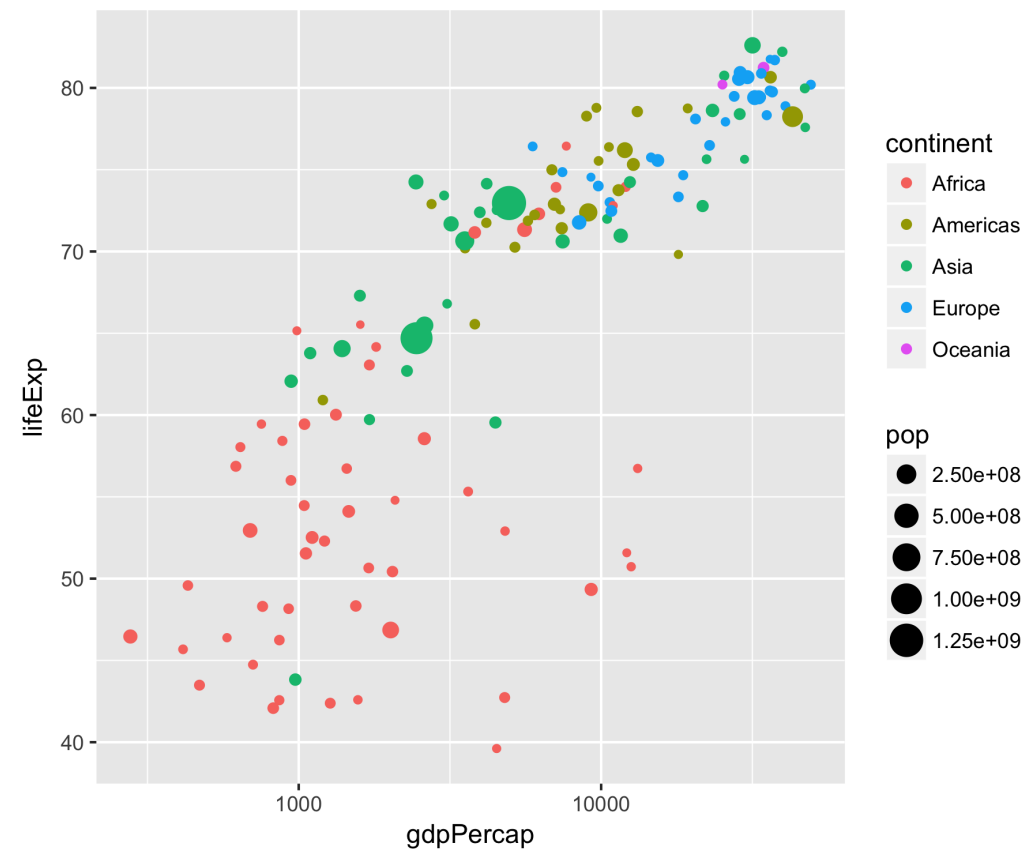
```
# A tibble: 142 x 6
  country continent  year lifeExp      pop  gdpPercap
  <fctr>    <fctr> <int>   <dbl>    <dbl>    <dbl>
1 Afghanistan    Asia  2007  43.828  31889923  974.5803
2   Albania    Europe  2007  76.423   3600523  5937.0295
3   Algeria    Africa  2007  72.301  33333216  6223.3675
4   Angola    Africa  2007  42.731  12420476  4797.2313
5  Argentina Americas  2007  75.320  40301927 12779.3796
6  Australia Oceania  2007  81.235  20434176 34435.3674
7   Austria    Europe  2007  79.829   8199783 36126.4927
8   Bahrain    Asia  2007  75.635   708573 29796.0483
9  Bangladesh    Asia  2007  64.062 150448339 1391.2538
10  Belgium    Europe  2007  79.441  10392226 33692.6051
# ... with 132 more rows
```

The color aesthetic



```
ggplot(gapminder_2007, aes(x = gdpPerCap, y = lifeExp, color = continent)) +  
  geom_point() +  
  scale_x_log10()
```

The size aesthetic



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp, color = continent,  
                           size = pop)) +  
  geom_point() +  
  scale_x_log10()
```

Aesthetics

| Aesthetic | Variable |
|-----------|-----------|
| x | gdpPerCap |
| y | lifeExp |
| color | continent |
| size | pop |

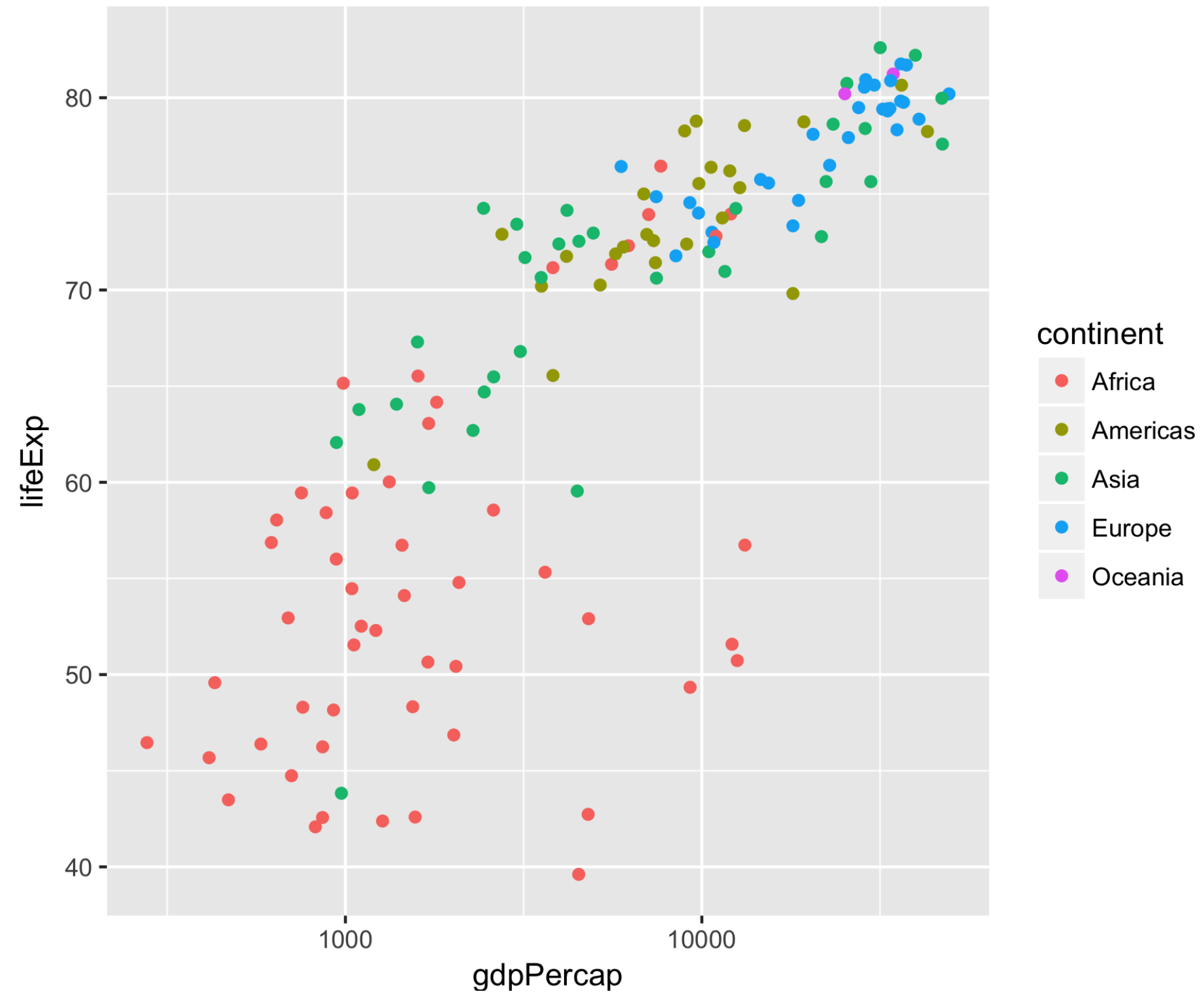
Faceting

INTRODUCTION TO THE TIDYVERSE

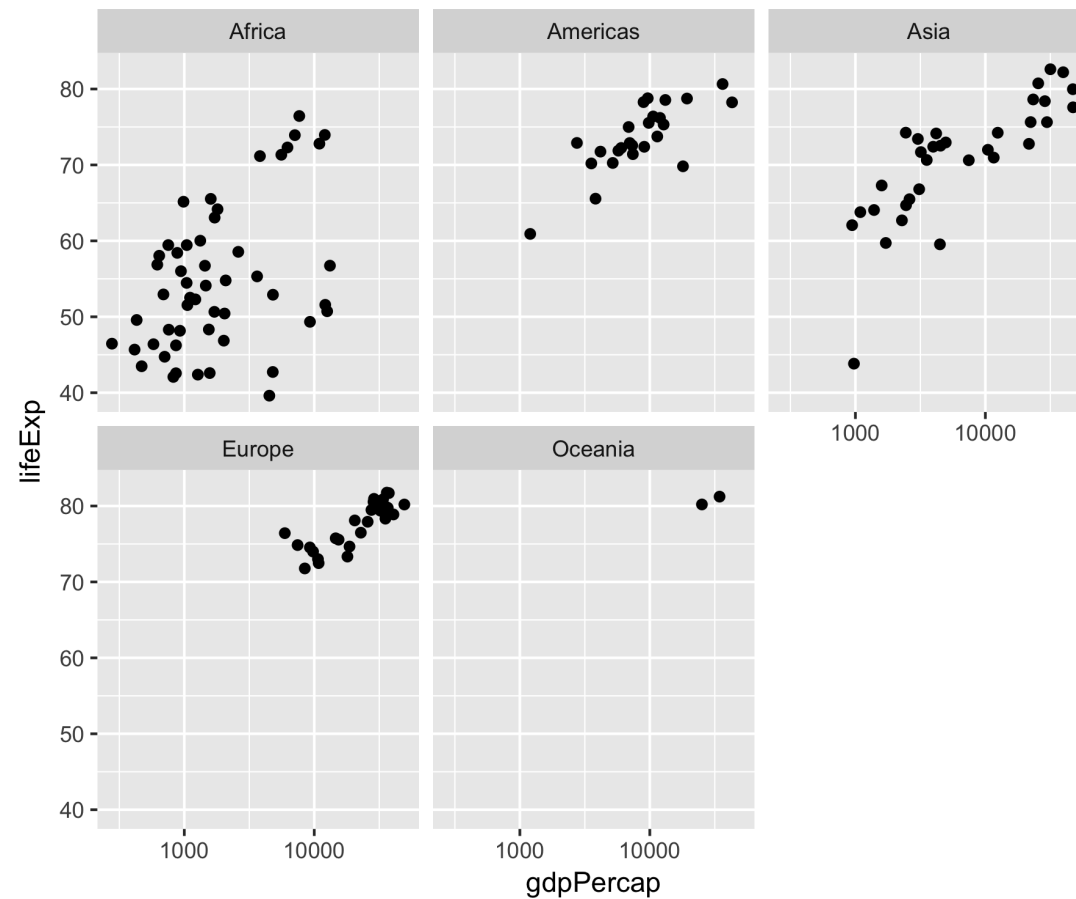


David Robinson

Chief Data Scientist, DataCamp



Faceting



```
ggplot(gapminder_2007, aes(x = gdpPercap, y = lifeExp)) +  
  geom_point() +  
  scale_x_log10() +  
  facet_wrap(~ continent)
```