Color palettes, themes, and styles
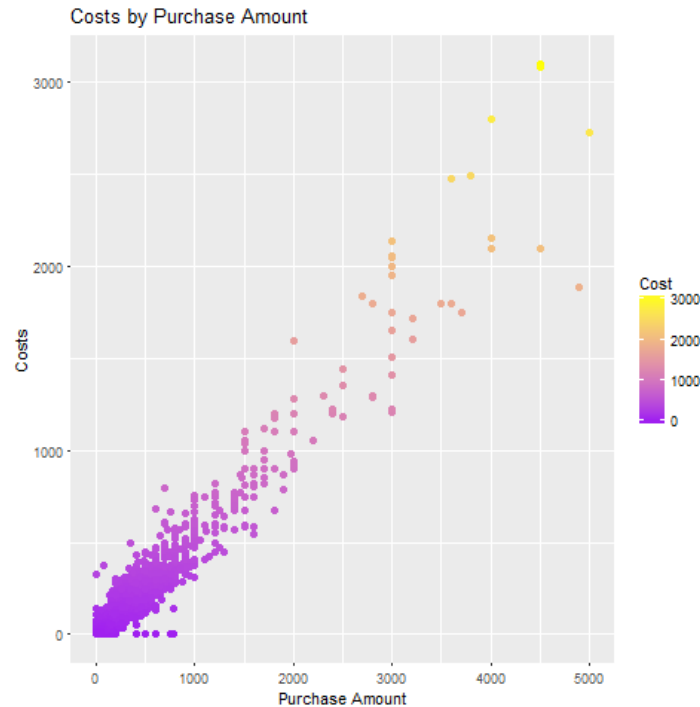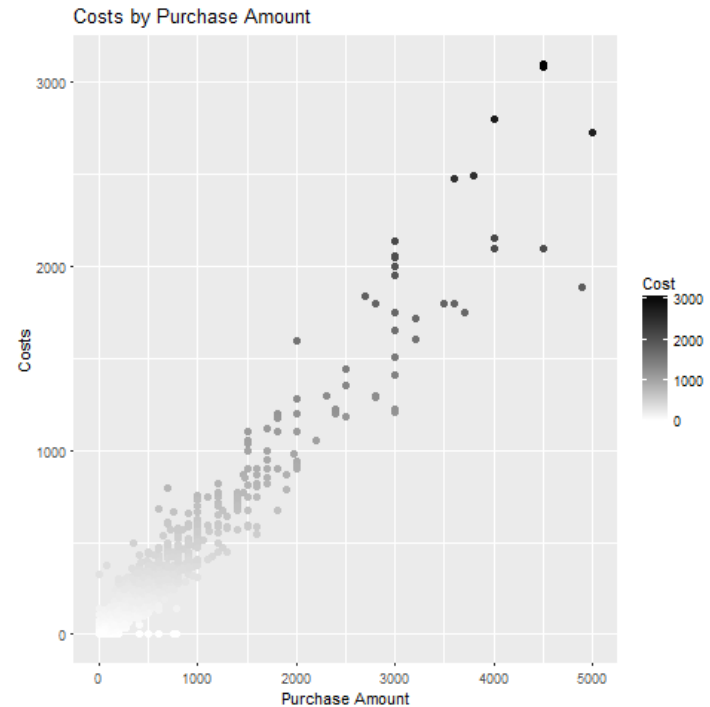
Colors do matter!
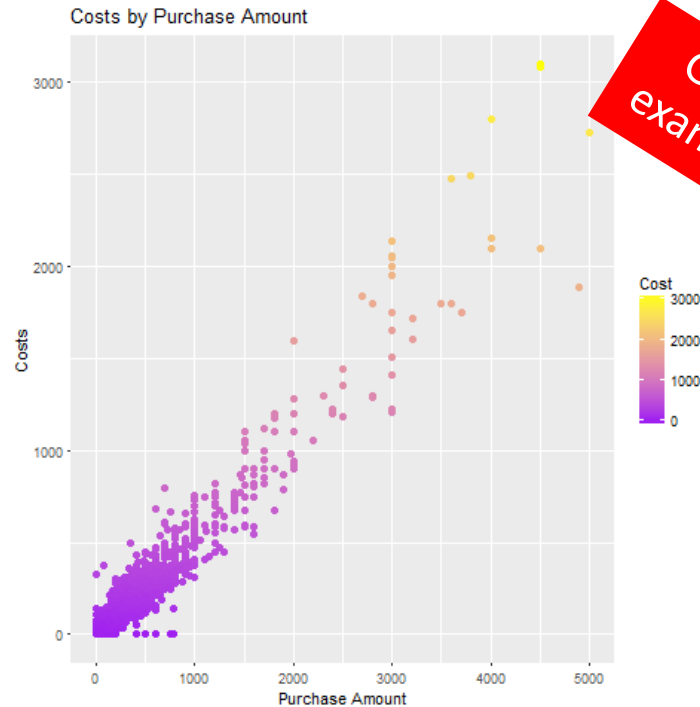


```
ggplot(myData, …,)) +
   geom_point() +……+
scale_color_gradient(low="purple",
        high="yellow")
```
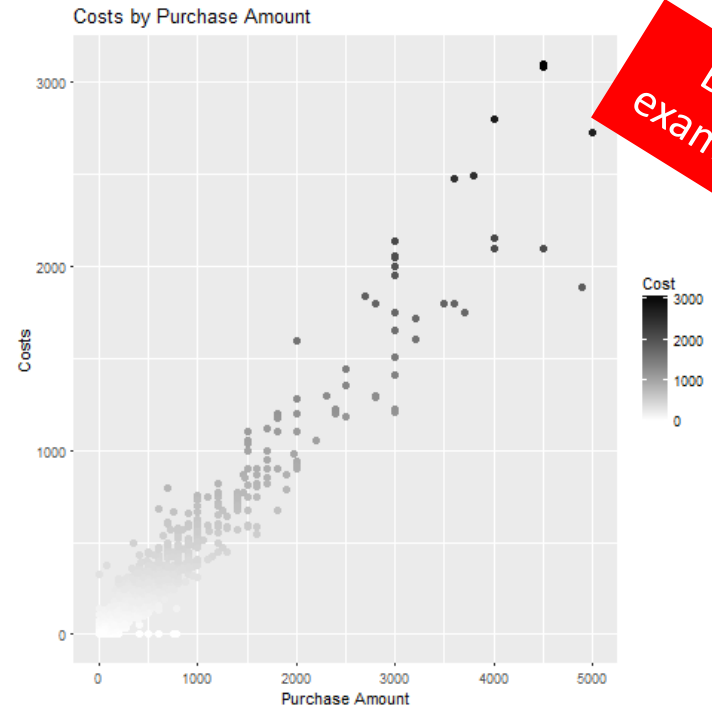
```
ggplot(myData, …,) +
   geom_point() +……+
scale_color_gradient(low="white",
        high="black")
```

Colors do matter!


```
ggplot(myData, …,)) +
  geom_point() +……+
scale_color_gradient(low="purple,
        high="yellow")
```

```
ggplot(myData, …,) +
  geom_point() +……+
scale_color_gradient(low="white",
        high="black")
```

Using palettes saves time

A **colormap** is a matched set of colors.

- Use palettes to coordinate plots:

    - within a projects

    - across projects

Sidenote: Download pre-existing color palettes i.e., wesanderson

Package name

```
install.packages("wesanderson")
```
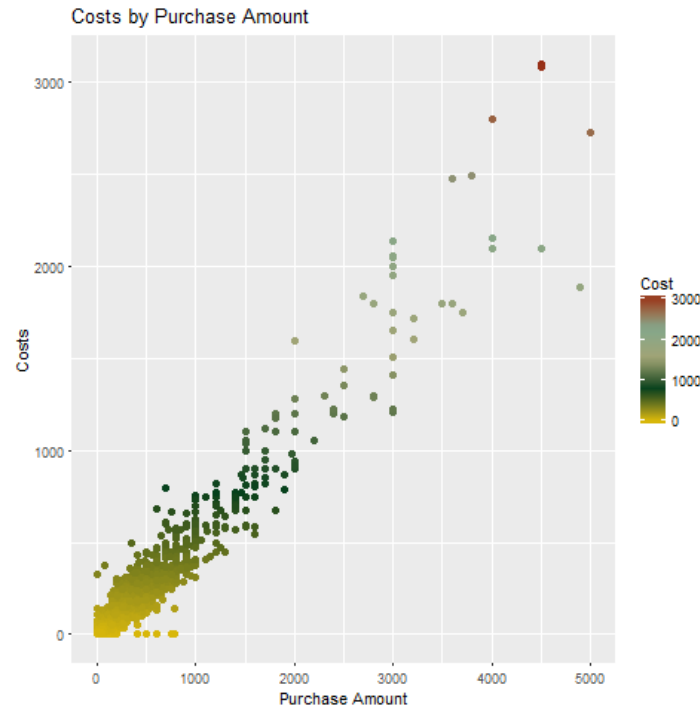
Sidenote: Download pre-existing color palettes i.e., wesanderson

Package name

```
install.packages("wesanderson")
```

Using color palettes to indicate a third dimension

You can set a default color palette for all plots ❶

See all palettes: names(wes_palettes) ❷

```
ggplot(myData, aes(PurchAmount,…) +
        geom_point()  + …… +
scale_colour_gradientn(colours= wes_palette("Cavalcanti1"))
```
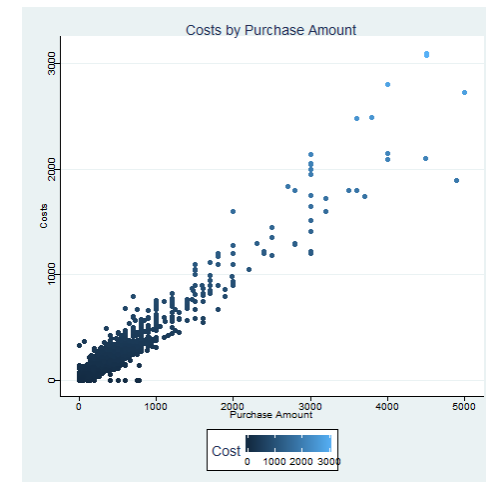
In `ggplot2`, we can use pre-defined themes

- Themes allow a consistent design. They can be shared within a company.

- The are easy to use and save repetitive work and are difficult to be "broken" or "ruined".

- The package **"**`ggthemes`**"** provides additional geoms, scales, and predefined themes:

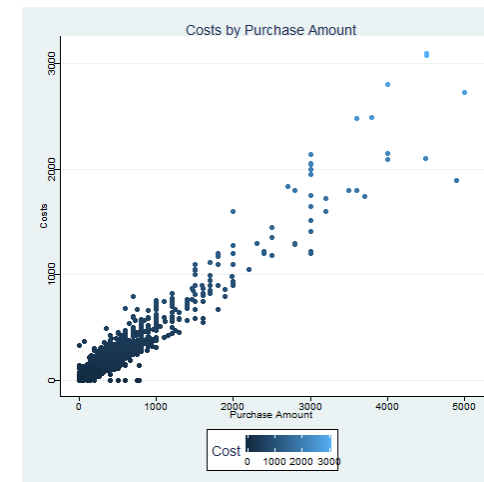**Economist theme**

Stata theme

In `ggplot2`, we can use pre-defined themes

- Themes allow a consistent design. They can be shared within a company.

- The are easy to use and save repetitive work and are difficult to be "broken" or "ruined".

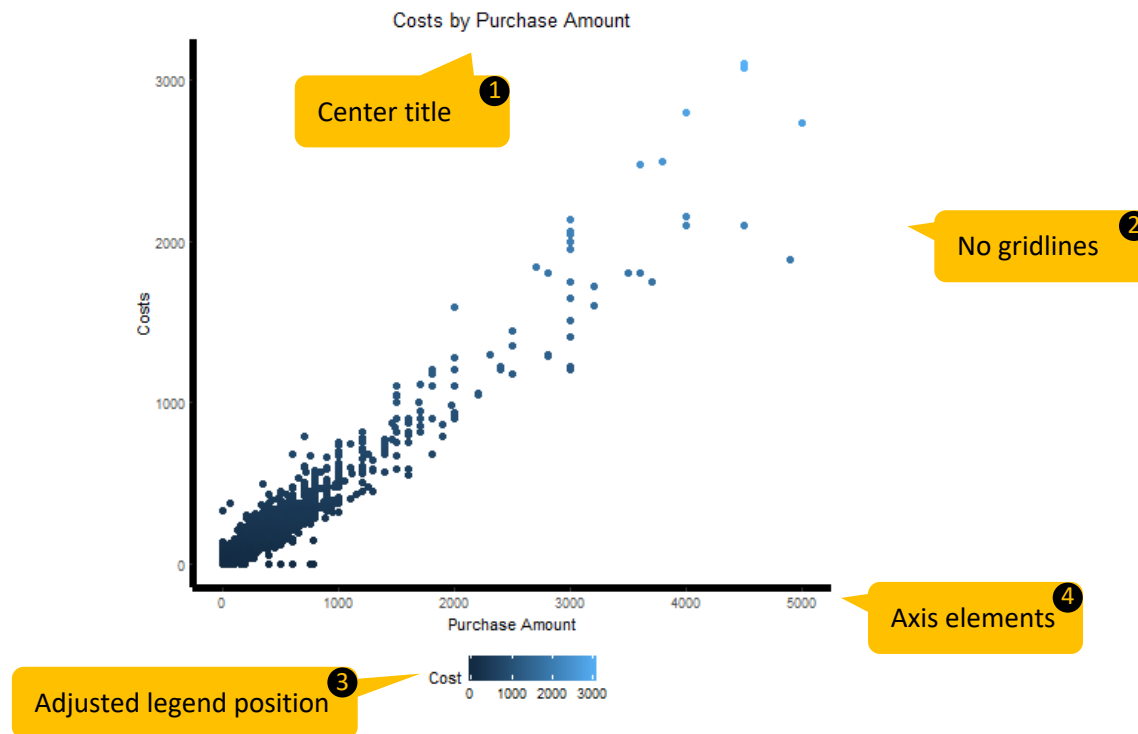- The package **"**`ggthemes`**"** provides additional geoms, scales, and predefined themes:

Economist theme

Stata theme

You can adapt any theme to your requirements


```
ggplot(myData, aes(PurchAmount, …))+ geom_point()
+……+ theme(plot.title = element_text(hjust = 0.5),
            panel.background = element_blank(),
                legend.position = "bottom",
        axis.line = element_line(size = 2)
```