

# A Variety of Plots Using the Same Dataset

We're going to use the built-in dataset 'mpg' to build a variety of plots. First, let's find out about the data by using the `head` function to view the first part of the data.

```
> head(mpg)
# A tibble: 6 x 11
  manufacturer model displ  year   cyl trans      drv   cty   hwy fl      class
  <chr>         <chr> <dbl> <int> <int> <chr>    <chr> <int> <int> <chr> <chr>
1 audi         a4      1.8  1999     4 auto(l5)  f      18    29 p      compact
2 audi         a4      1.8  1999     4 manual(m5) f      21    29 p      compact
3 audi         a4      2    2008     4 manual(m6) f      20    31 p      compact
4 audi         a4      2    2008     4 auto(av)   f      21    30 p      compact
5 audi         a4      2.8  1999     6 auto(l5)   f      16    26 p      compact
6 audi         a4      2.8  1999     6 manual(m5) f      18    26 p      compact
```

We can explore the data further by asking for all the possibilities in each column using the `unique` function. For example, we can check to see how many different types of cars there are:

```
> unique(mpg$manufacturer)
[1] "audi"          "chevrolet"    "dodge"       "ford"        "honda"       "hyundai"     "jeep"
[8] "land rover"   "lincoln"     "mercury"     "nissan"      "pontiac"     "subaru"      "toyota"
[15] "volkswagen"
```

We can use the `length` function to give us the total number of unique possibilities:

```
> length(unique(mpg$manufacturer))
[1] 15
```