

Best MPG by transmission type

Alejandro Borges Sanchez

7/12/2021

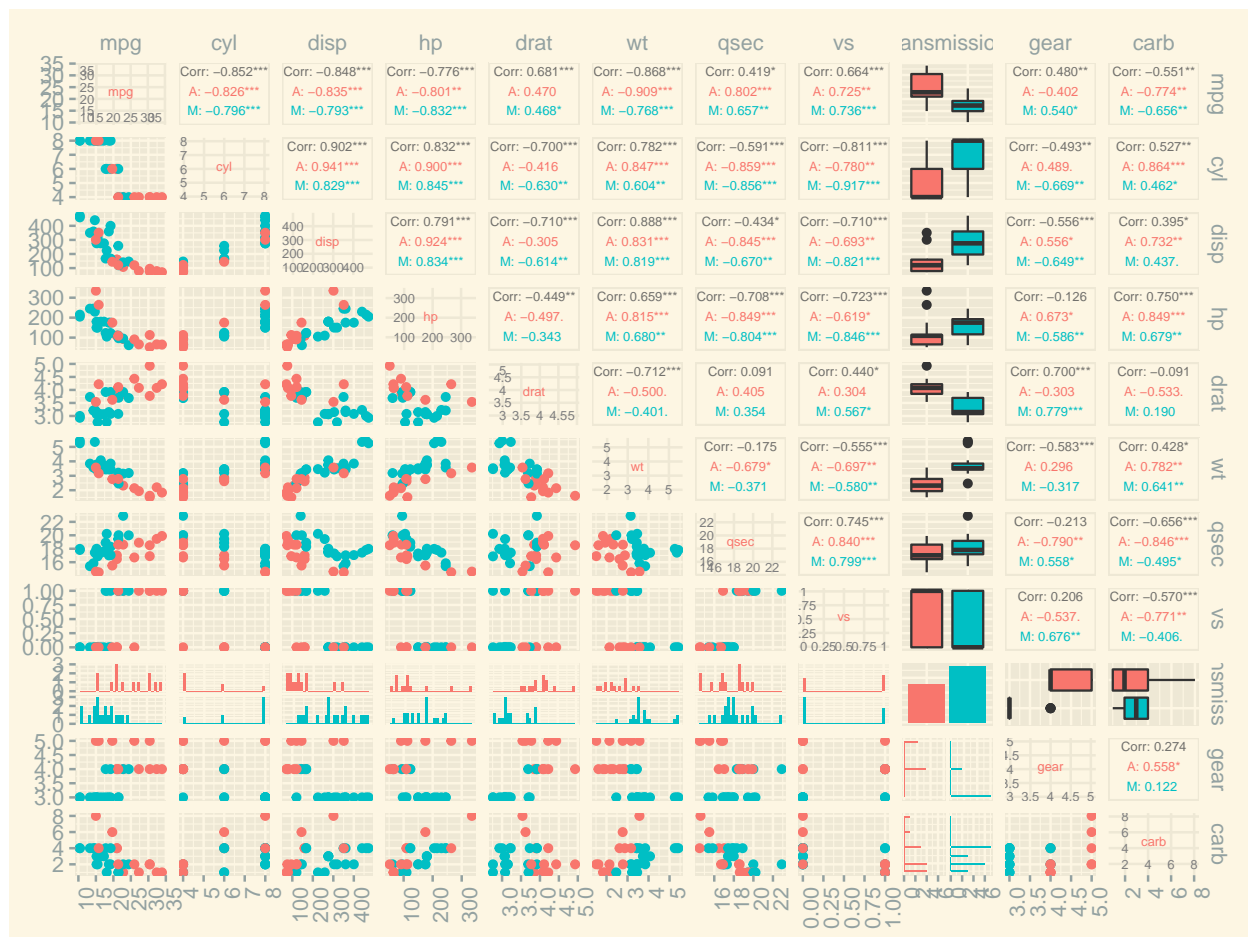
The data

The editors have been kind enough to send us a wonderful dataset from the latest cars in the known universe (1973-1974), which will allow us to see, FINALLY, which transmission type is better for our wallet!

You can see it in all its glory below:

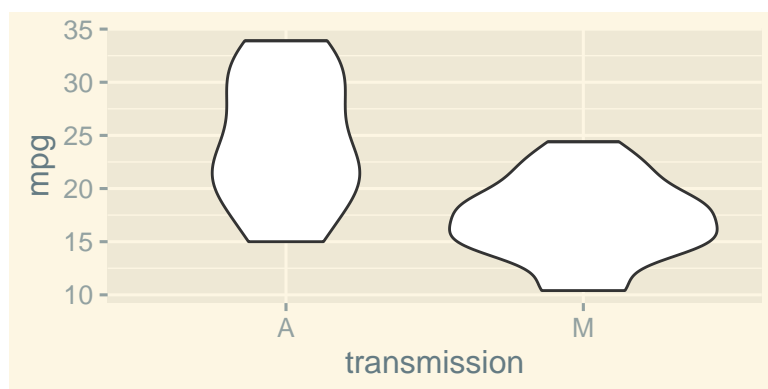
```
## # A tibble: 6 x 12
##   Model  mpg   cyl  disp    hp  drat    wt  qsec    vs transmission  gear  carb
##   <chr> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <fct>      <dbl> <dbl>
## 1 Mazd~  21     6   160   110  3.9   2.62  16.5    0 automatic        4     4
## 2 Mazd~  21     6   160   110  3.9   2.88  17.0    0 automatic        4     4
## 3 Dats~ 22.8     4   108    93  3.85  2.32  18.6    1 automatic        4     1
## 4 Horn~ 21.4     6   258   110  3.08  3.22  19.4    1 manual           3     1
## 5 Horn~ 18.7     8   360   175  3.15  3.44  17.0    0 manual           3     2
## 6 Vali~ 18.1     6   225   105  2.76  3.46  20.2    1 manual           3     1
```

Now that is a lot of variables. We need to see how good (or bad), do those correlate with each other.



So there we can see a lot of correlated variables. So, what might be interesting here? For one, most of the variable exhibit some sort of correlation, ranging from weak to strong, to Miles per Gallon.

However, we are most interested here in determining the impact of the transmission type to the miles per gallon. So that's where we will start our iterative process and build up from that.



R Markdown

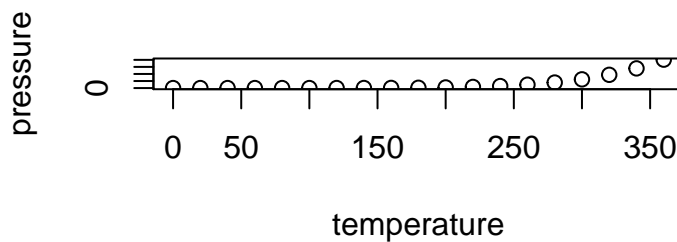
This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
##      speed      dist
##  Min.   : 4.0    Min.   : 2.00
##  1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##  Mean   :15.4    Mean   : 42.98
##  3rd Qu.:19.0    3rd Qu.: 56.00
##  Max.   :25.0    Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.