Dependance of Fuel Efficiency on Transmission Type

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Executive Summary

stuff

quick summary

```
library(ggplot2)
str(mtcars)
```

```
## 'data.frame':    32 obs. of  11 variables:
##  $ mpg : num  21 21 22.8 21.4 18.7 18.1 14.3 24.4 22.8 19.2 ...
##  $ cyl : num  6 6 4 6 8 6 8 4 4 6 ...
##  $ disp: num  160 160 108 258 360 ...
##  $ hp  : num  110 110 93 110 175 105 245 62 95 123 ...
##  $ drat: num  3.9 3.9 3.85 3.08 3.15 2.76 3.21 3.69 3.92 3.92 ...
##  $ wt  : num  2.62 2.88 2.32 3.21 3.44 ...
##  $ qsec: num  16.5 17 18.6 19.4 17 ...
##  $ vs  : num  0 0 1 1 0 1 0 1 1 1 ...
##  $ am  : num  1 1 1 0 0 0 0 0 0 0 ...
##  $ gear: num  4 4 4 3 3 3 3 4 4 4 ...
##  $ carb: num  4 4 1 1 2 1 4 2 2 4 ...
```

```
h<-ggplot(data=mtcars,aes(y=mpg,x=wt,colour=factor(am),pch=factor(cyl))) + geom_point(size=2
print(h)
```

mainly interested in mpg vs am.

consider mpg vs am mpg vs am + disp mpg vs am + disp + cyl mpg vs am + disp + cyl + wt

```
fit<-lm(data=mtcars,mpg ~ factor(am))
fit2<-lm(data=mtcars,mpg ~ factor(am) + disp   )
```

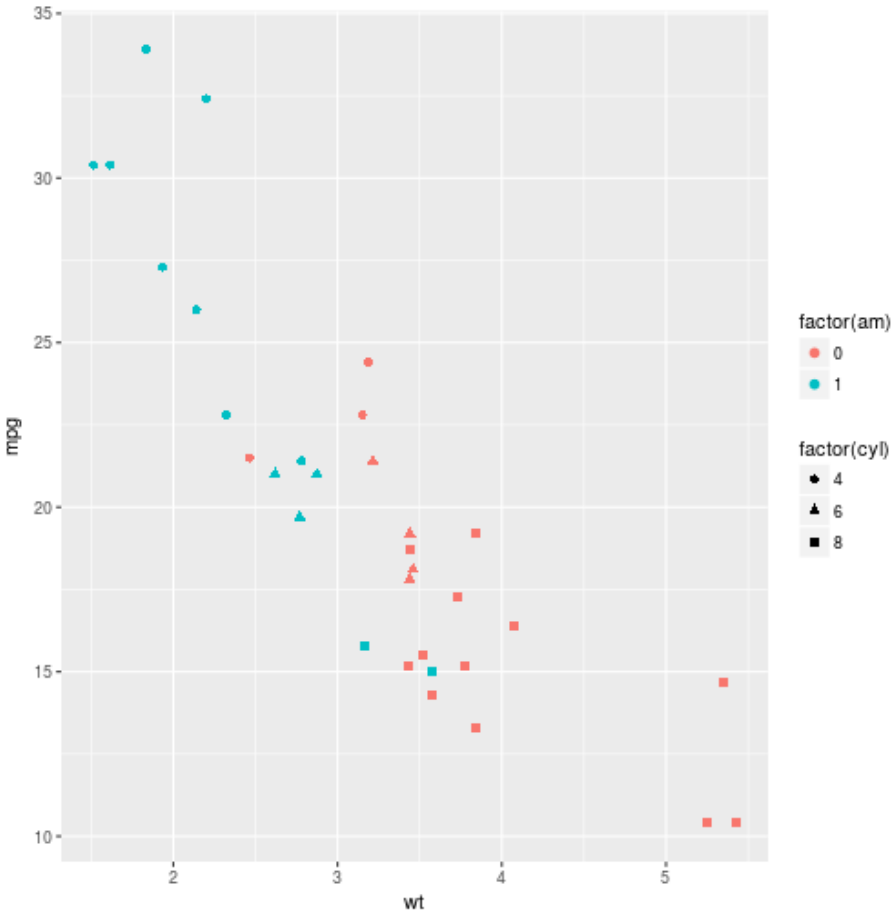

Figure 1: plot of chunk unnamed-chunk-1

```
fit3<-lm(data=mtcars,mpg ~ factor(am) + disp  + wt )
```

Appendix