

VISUALIZATION

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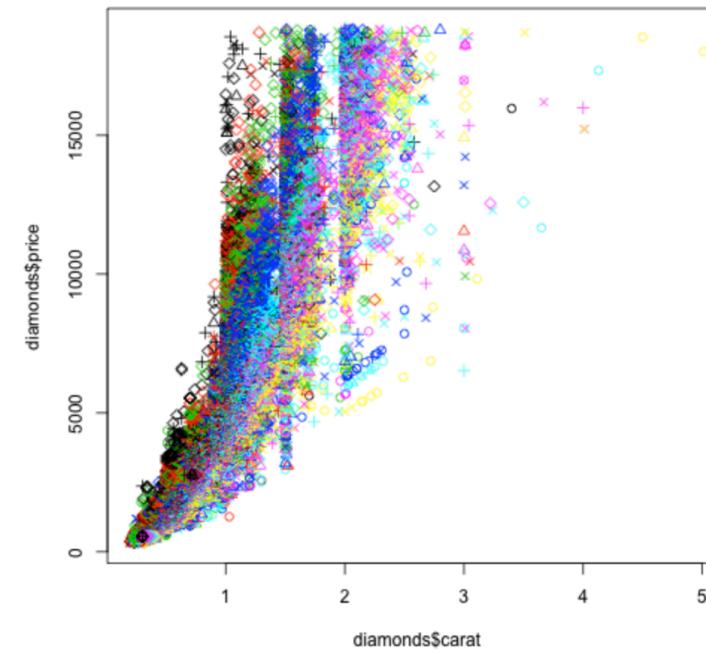


A picture is worth 1000 words

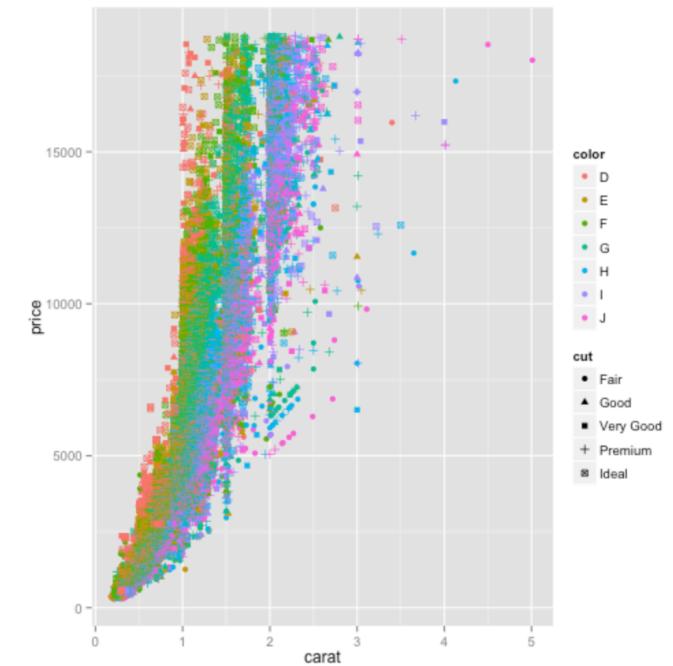
- Looking at data is critical
 - True for you as an analyst
 - True for you as a communicator
- You should make dozens of graphics for each dataset
 - Most of these are for your eyes only
 - A (small) subset are for others

Why ggplot?

- Makes good graphics with relative ease
 - “Relative” here is compared to base R graphics



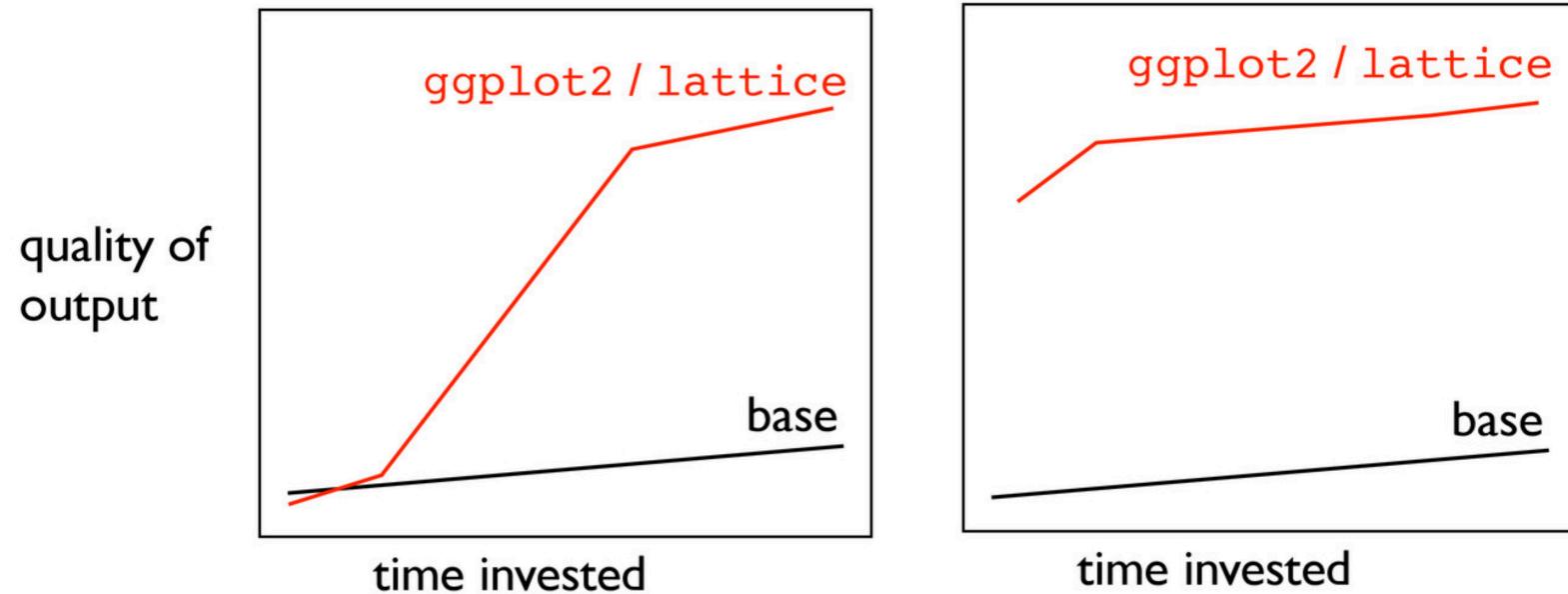
VS



“Don’t teach built-in plotting to beginners (teach ggplot2)” – blog post by David Robinson

Why ggplot?

- Cohesiveness shortens the learning curve
 - Same principles underlie all graphic types



“hello ggplot2!” – talk by Jenny Bryan



Learning ggplot

- Lots of materials online
- google is your friend
 - Start searches with “ggplot”
 - StackOverflow has lots of questions and useful answers
 - Don’t worry about googling stuff you “should know”

↻ David Robinson Retweeted

Myfanwy Johnston @Vooverb · Aug 10

Attention #rstats beginners - googling is okay. I repeat, googling is okay. And as it turns out, repeat googling is okay too.



David Robinson @drob

Just discovered that I've visited this ggplot2 question 29 times in the last two years

Worth it every time

5 54 153



Using ggplot

- Basic graph components
 - data
 - aesthetic mappings
 - geoms
- Advanced graph components
 - facets
 - scales
 - statistics
- A graph is built by combining these components
- Components are consistent across graph types
 - Scatterplots, bar graphs, density plots, ridge plots ...



Time to code!!

