### Statistics for Scared People

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Who is this book for?

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# Part I Questions about your goals

#### Chapter 1

### What is your goal?

#### 1.1 Exploratory or hypothesis generation

## 1.2 Inferential or hypothesis testing "Are things different"

This is a hypothesis, not a description. Description can highlight, but doesn't test what's different. Descriptions can still have a bias (mean vs median vs range all show different things descriptively, PCA problems). Doesn't mean it's an experiment.

```
summary(cars)
```

```
## speed dist

## Min. : 4.0 Min. : 2.00

## 1st Qu.:12.0 1st Qu.: 26.00

## Median :15.0 Median : 36.00

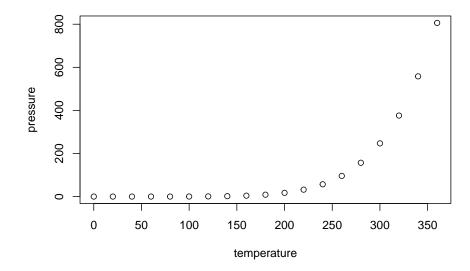
## Mean :15.4 Mean : 42.98

## 3rd Qu.:19.0 3rd Qu.: 56.00

## Max. :25.0 Max. :120.00
```

## 1.3 Physical or mechanistic predictions - you can only statistics them away sometimes

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.

# Part II Questions about your data

## Chapter 2

## Final Words

We have finished a nice book.