CHAPTER OVERVIEW

7: ANOVA

A fun bit of stats history (Salsburg 2001). Sir Ronald Fisher invented the ANOVA, which we learn about in this section. He wanted to publish his new test in the journal Biometrika. The editor at the time was Karl Pearson (remember Pearson's r for correlation?). Pearson and Fisher were apparently not on good terms, they didn't like each other. Pearson refused to publish Fisher's new test. So, Fisher eventually published his work in the Journal of Agricultural Science. Funnily enough, the feud continued onto the next generation. Years after Fisher published his ANOVA, Karl Pearson's son Egon Pearson, and Jersey Neyman revamped Fisher's ideas, and re-cast them into what is commonly known as null vs. alternative hypothesis testing. Fisher didn't like this very much.

We present the ANOVA in the Fisherian sense, and at the end describe the Neyman-Pearson approach that invokes the concept of null vs. alternative hypotheses.

7.1: ANOVA is Analysis of Variance
7.2: One-factor ANOVA
7.3: What does F mean?
7.4: ANOVA on Real Data
7.5: ANOVA Summmary
7.6: References