Bar Graphs

Bar chart with Error Bars
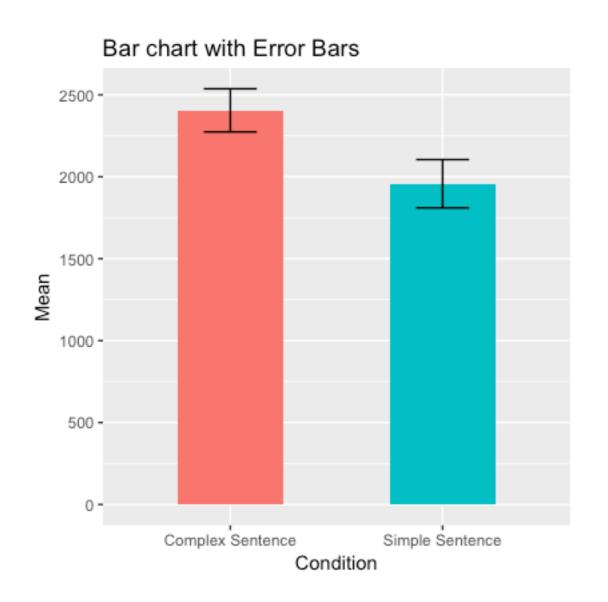

Bar graphs tend to be quite limited in terms of what they communicate. Here they communicate the means for levels of a factor and information about variance. But they don't tell us anything about the *distribution* of the data.

```
> data_summ <- data_long %>% group_by(Condition) %>% summarise(Mean = mean(RT), sd = sd(RT))
> ggplot(data_summ, aes(x = Condition, y = Mean, group = Condition, fill = Condition, ymin =
Mean-sd, ymax = Mean+sd)) + geom_bar(stat = "identity", width = .5) + geom_errorbar(width = .25)
+  ggtitle("Bar chart with Error Bars") + guides(fill = FALSE)
```

Anscombe's Quartet