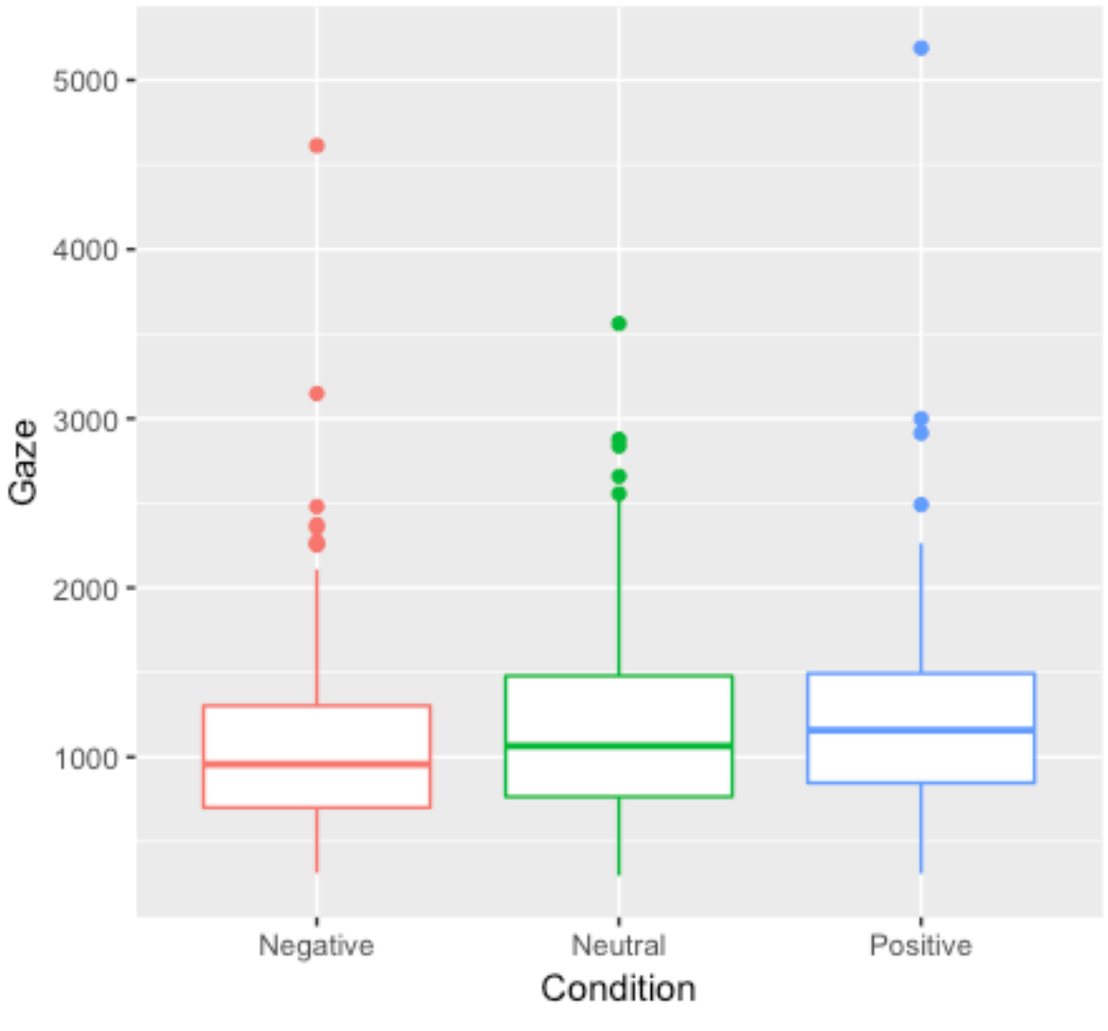
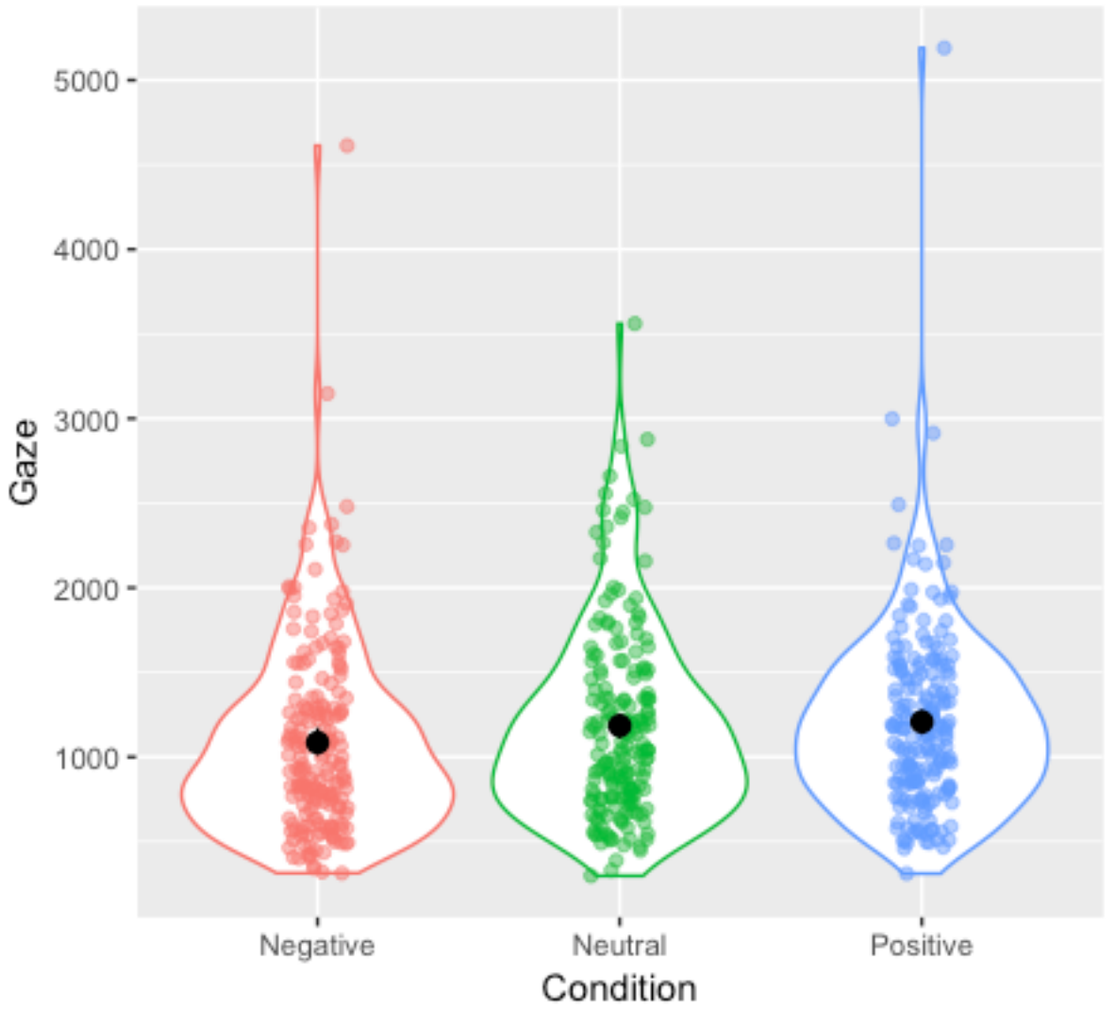
Visualising the Data

```
ggplot(DV, aes(x = Condition, y =
Gaze, colour = Condition)) +
geom_boxplot() + guides(colour =
FALSE)
```




```
ggplot(DV, aes(x = Condition, y = Gaze,
colour = Condition)) + geom_violin() +
geom_jitter(width = .1, alpha = .5) +
  stat_summary(fun.data =
"mean_cl_boot", colour = "black") +
guides(colour = FALSE)
```



```
25  model.null <- lmer (Gaze ~ (1 + Condition| Subject) + (1 + Condition| Item), data=DV, REML=TRUE)
26  model.full <- lmer (Gaze ~ Condition + (1 + Condition| Subject) + (1 + Condition| Item), data=DV, REML=TRUE)
27  anova (model.null, model.full)
28  summary (model.full)
```

- Line 25 creates a variable called model.null associated with just random effects of Subjects and Items. Note there is no fixed effect.
- Line 26 create a variable called model.full which includes both the random and fixed effects.
- Line 27 tests where the model.full is a better fit to our data and model.null. If it is, it means adding the fixed effect means we are able to explain our data better than if we don't add it.
- Line 28 then asks for the model.full parameters to be displayed.