

Analysis of Burge Lab Porter Tasting

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```
knitr::read_chunk("chunks.R")
```

Last updated: 2018-02-28

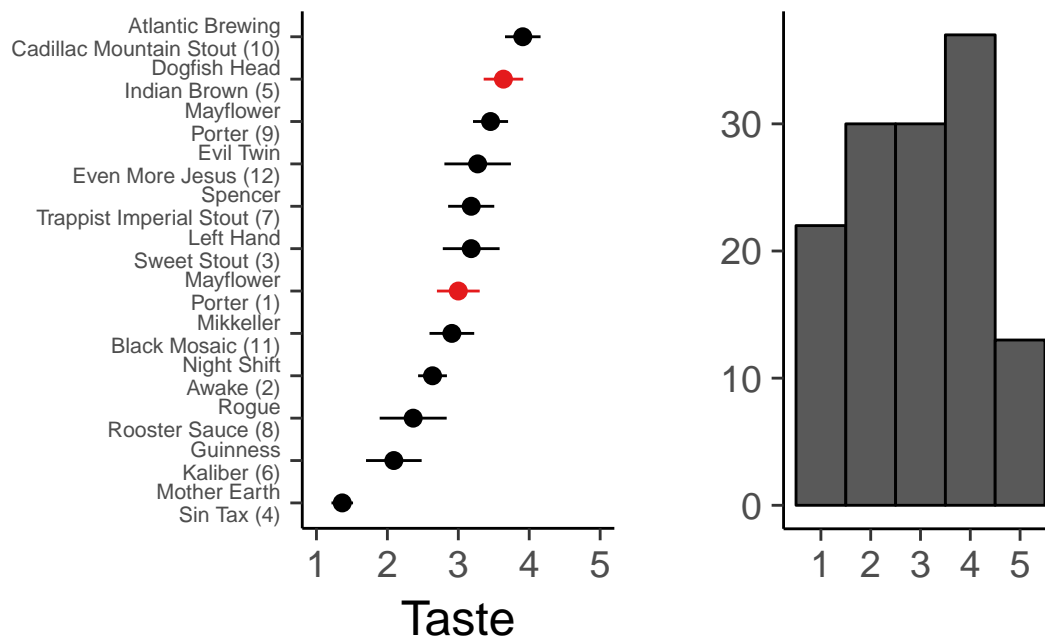
Code version: 6336f28

The code below loads and analyzes the Burge Lab 2018 Porter Tasting Night Results

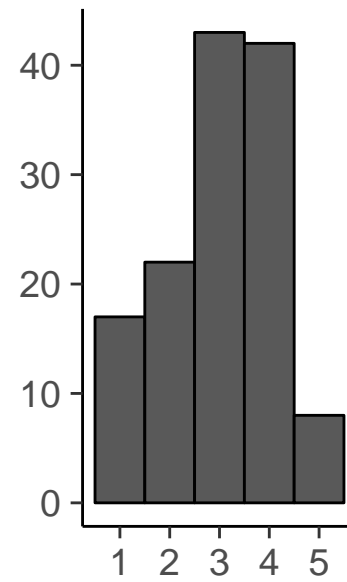
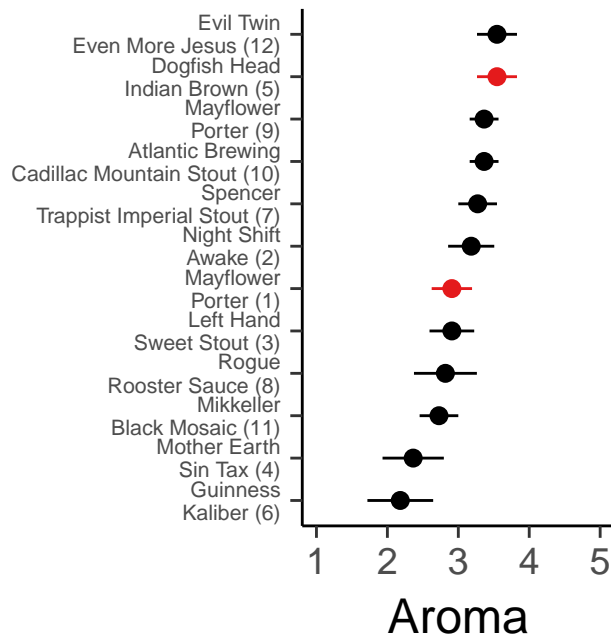
```
[1] 528 20
```

Overall Preferences Among Beers

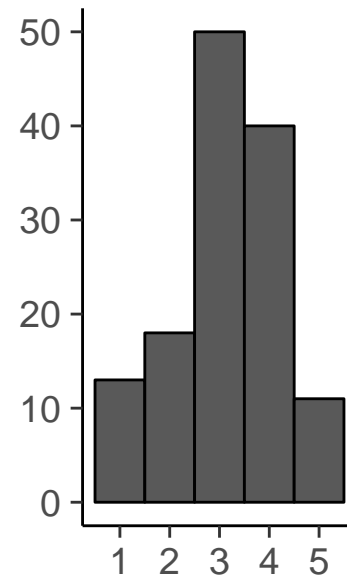
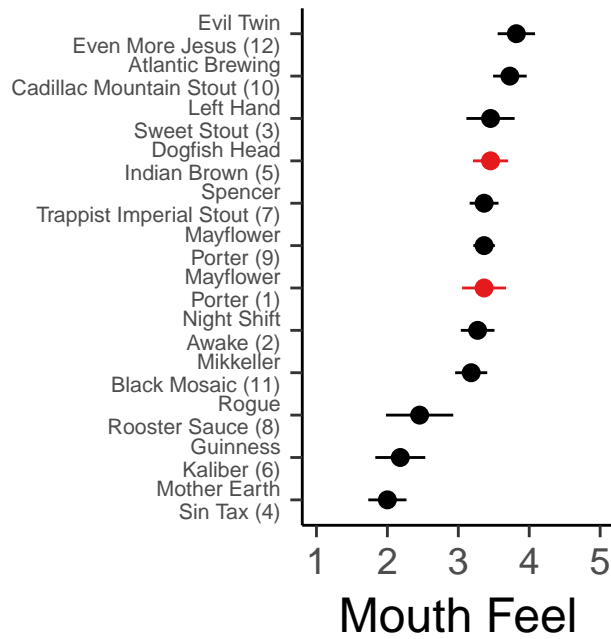
Taste



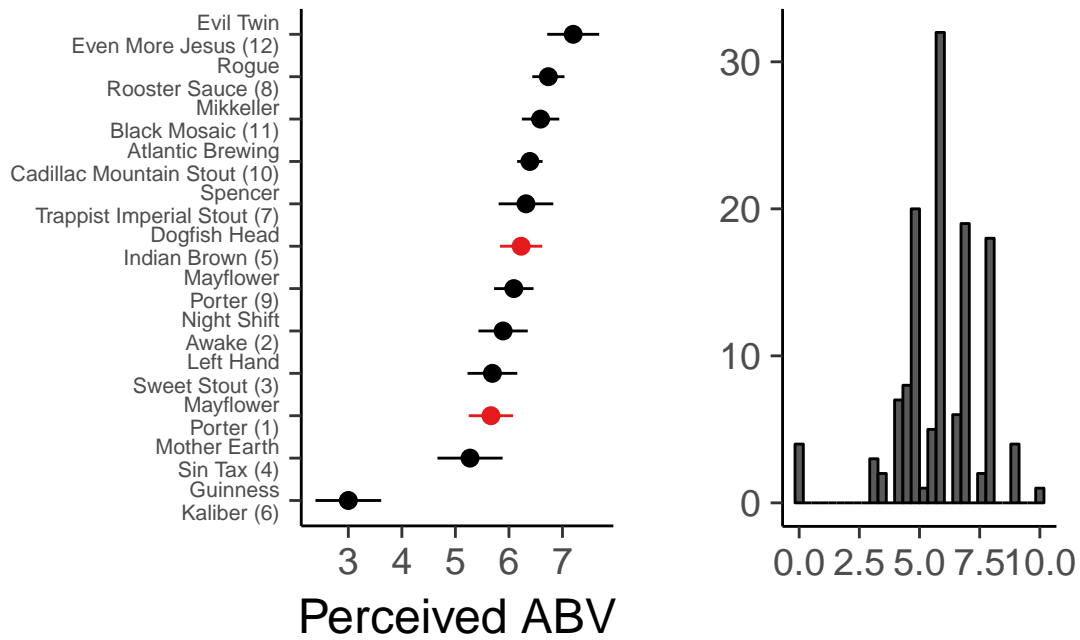
Aroma



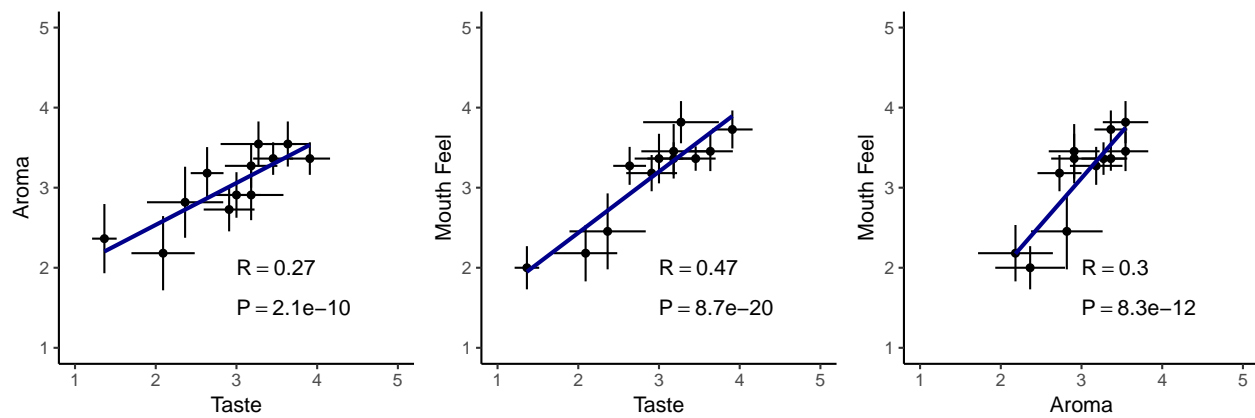
Mouth Feel



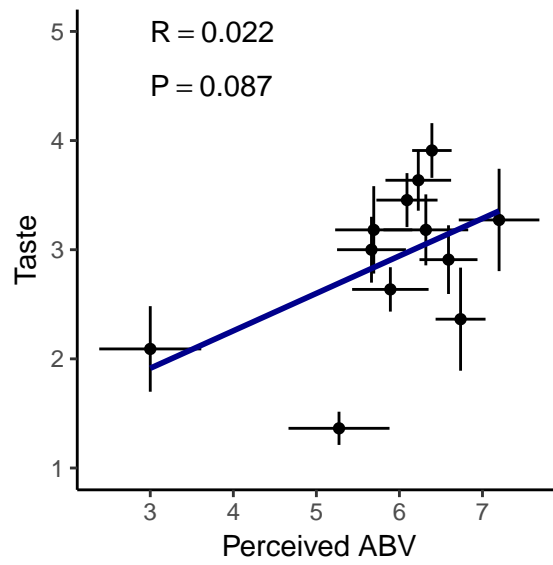
Perceived ABV



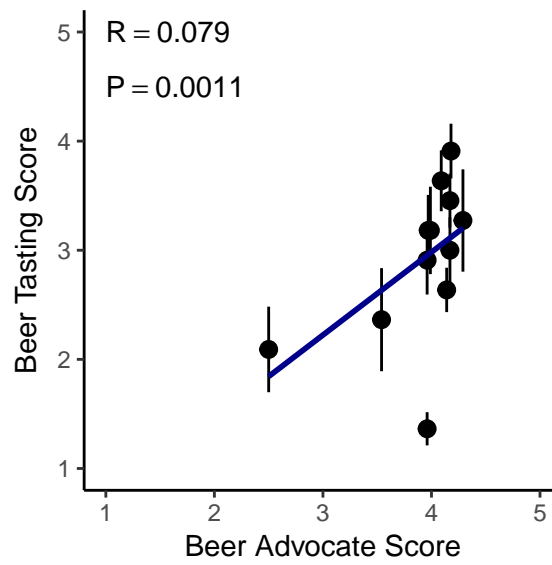
Taste, Aroma, Mouth Feel Correlations



ABV vs Taste

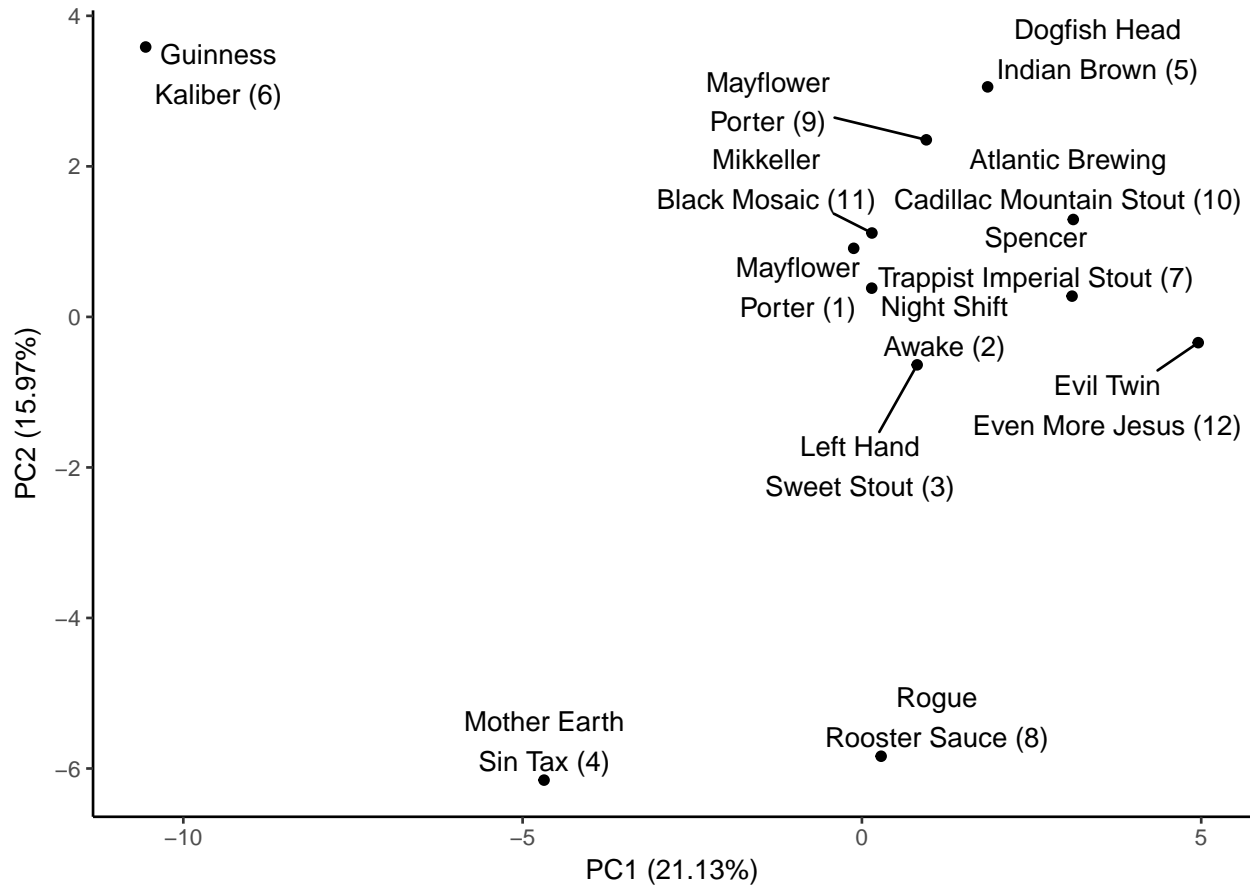


Comparison to other rankings

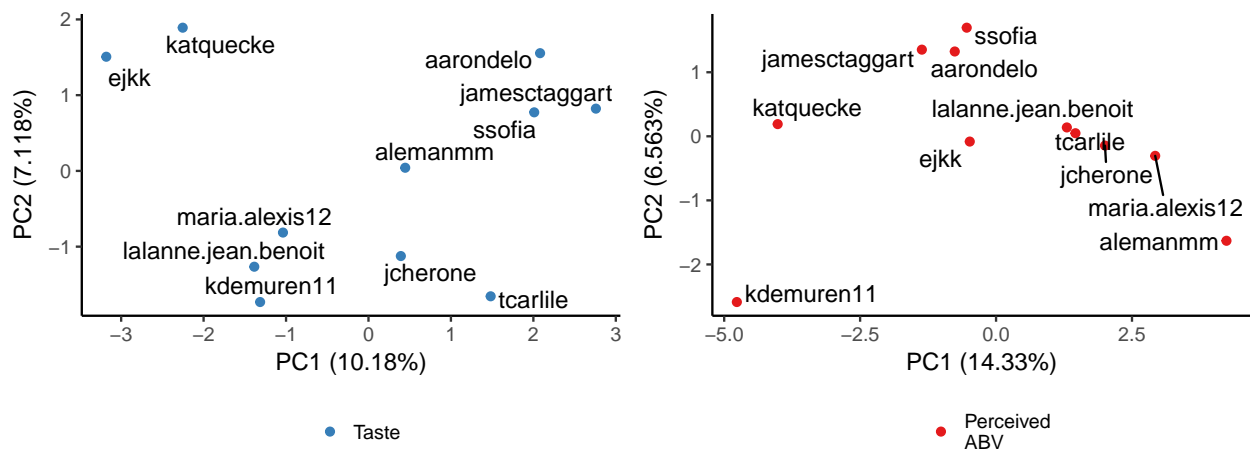


Clustering

clustering of beers

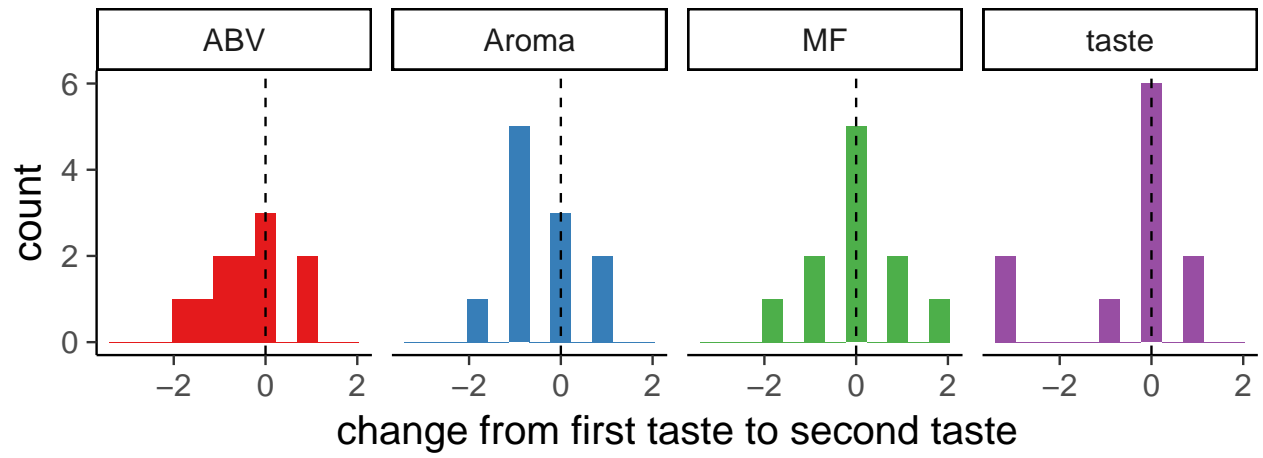


clustering of people

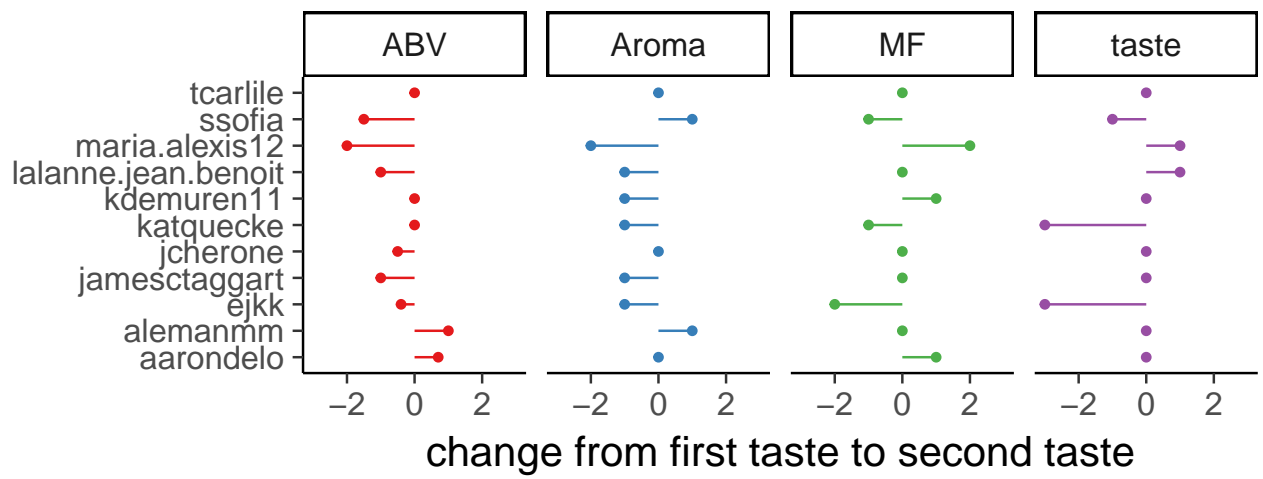


Mayflower Porter #1 vs Mayflower Porter #9

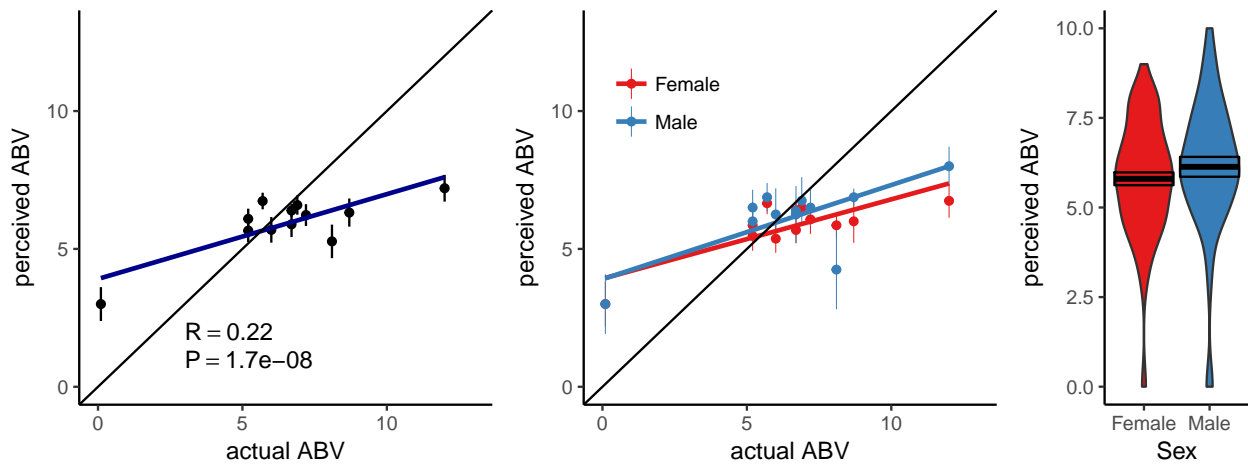
Overall Consistency



Individual Ranking Consistency



Percieved vs True ABV

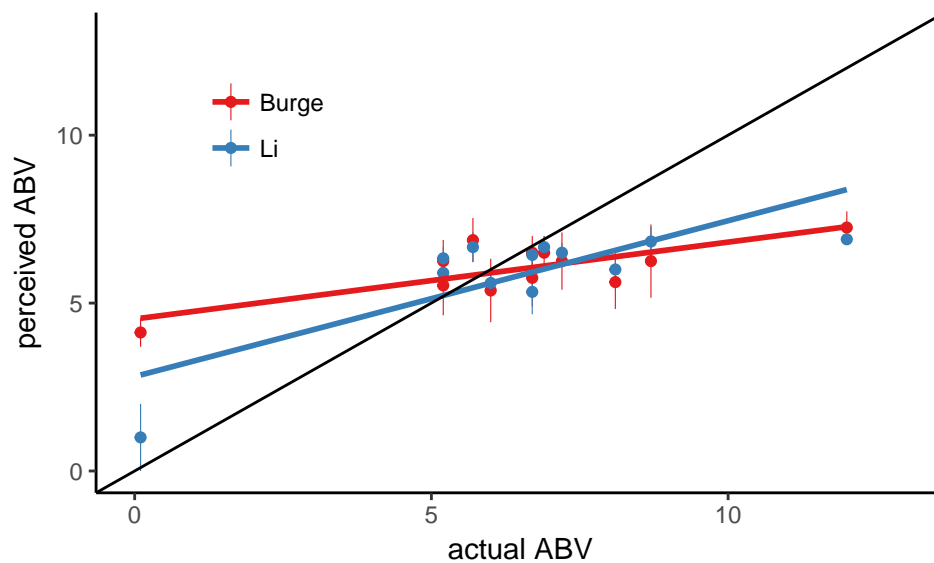


Welch Two Sample t-test

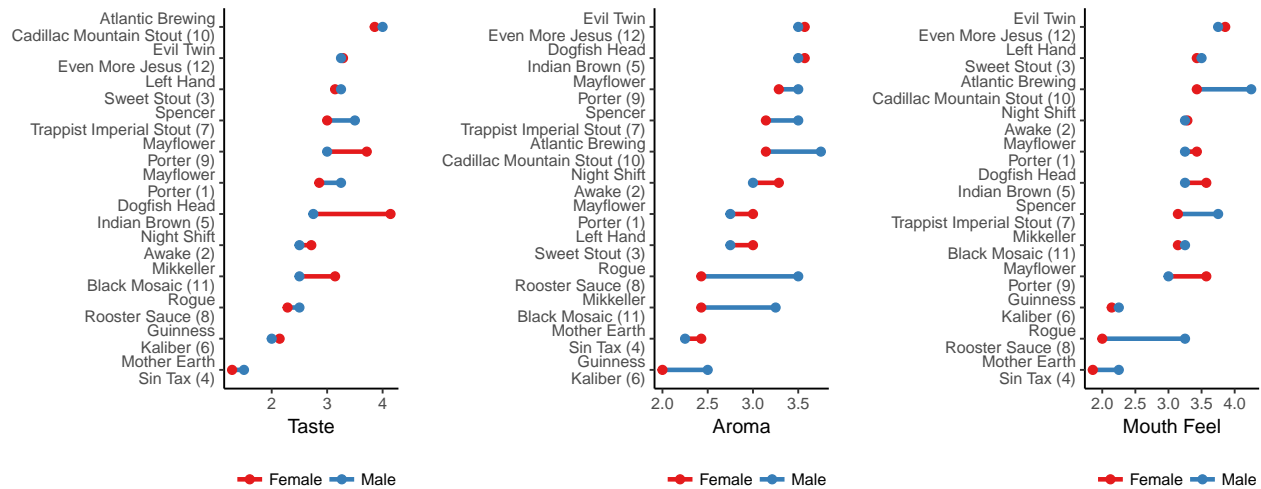
```
data: value by Sex
t = -1.0138, df = 86.039, p-value = 0.3135
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.9896266  0.3211742
sample estimates:
mean in group Female    mean in group Male
      5.801190           6.135417
```

Wilcoxon rank sum test with continuity correction

```
data: value by Sex
W = 1715.5, p-value = 0.1514
alternative hypothesis: true location shift is not equal to 0
```

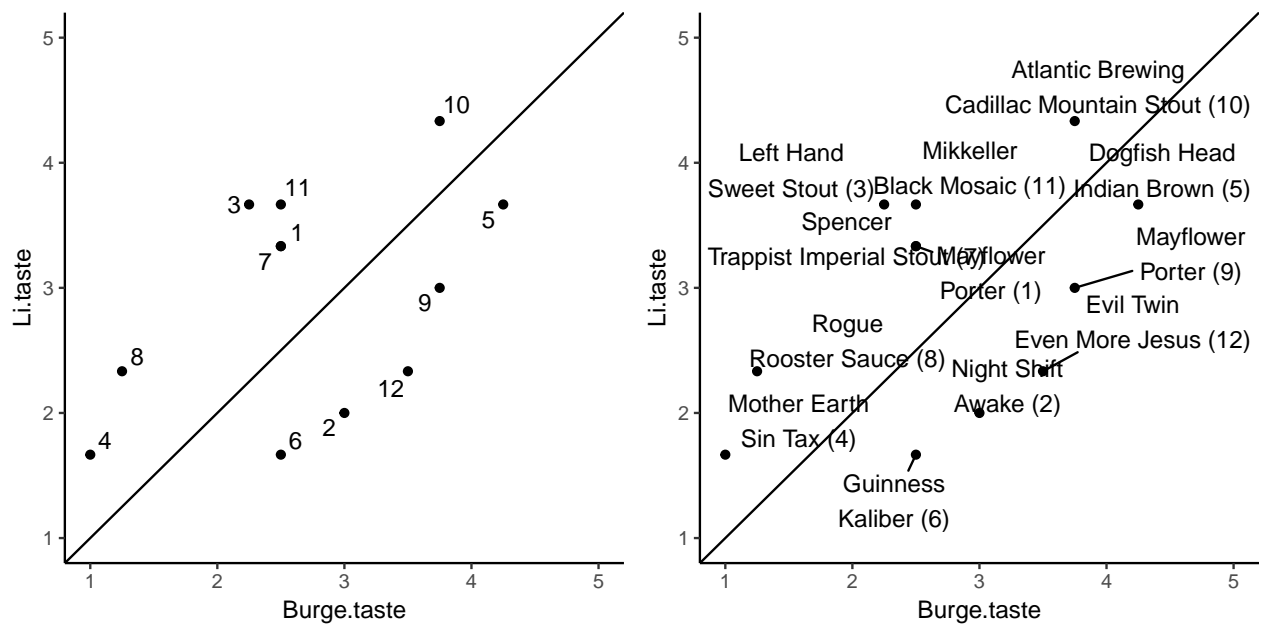


Male vs Female preferences



Inter-Lab Beer Preferences

Burge vs Li Lab Preferences



Session information

R version 3.4.0 (2017-04-21)
Platform: x86_64-apple-darwin15.6.0 (64-bit)
Running under: macOS 10.13.3

Matrix products: default

BLAS: /Library/Frameworks/R.framework/Versions/3.4/Resources/lib/libRblas.0.dylib
LAPACK: /Library/Frameworks/R.framework/Versions/3.4/Resources/lib/libRlapack.dylib

locale:

[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8

attached base packages:

[1] stats graphics grDevices utils datasets methods base

other attached packages:

[1] bindrcpp_0.2 corrplot_0.84 cowplot_0.8.0
[4] RColorBrewer_1.1-2 ggrepel_0.7.0 ggplot2_2.2.1
[7] broom_0.4.2 tidyr_0.7.1 dplyr_0.7.4

loaded via a namespace (and not attached):

[1] Rcpp_0.12.13 compiler_3.4.0 git2r_0.21.0 plyr_1.8.4
[5] bindr_0.1 tools_3.4.0 digest_0.6.15 evaluate_0.10.1
[9] tibble_1.3.4 nlme_3.1-131 gtable_0.2.0 lattice_0.20-35
[13] pkgconfig_2.0.1 rlang_0.2.0 psych_1.7.8 yaml_2.1.16
[17] parallel_3.4.0 stringr_1.3.0 knitr_1.20 tidyselect_0.2.1
[21] rprojroot_1.3-2 grid_3.4.0 glue_1.2.0 R6_2.2.2
[25] foreign_0.8-69 rmarkdown_1.8 purrr_0.2.3 reshape2_1.4.2
[29] magrittr_1.5 backports_1.1.1 scales_0.5.0 htmltools_0.3.6
[33] assertthat_0.2.0 mnormt_1.5-5 colorspace_1.3-2 labeling_0.3
[37] stringi_1.1.6 lazyeval_0.2.1 munsell_0.4.3