- Rather than using the R interface, you should use the RStudio graphical interface.

- Download it from www.rstudio.com

- When you use RStudio, it looks like this:

RStudio File Edit Code View Plots Session Build Debug Tools Window Help

Thu 15:21

~/Desktop/Air Work/MRes 2016:17/R workshop MRes/R workshop directory/Workshop - RStudio

Go to file/function | Addins | Workshop

Workshop script2.R | DV

Source on Save | Run | Source

```
7  library (lmerTest)
8  library (lsmeans)
9  library (pbkrtest)
10
11 #Read in First Pass Data
12 FPs <- read.csv("~/Desktop/Air Work/R analyses/Indirect Request Expt/Experiment 1 - probability of success - Libby's data/FP
13
14 #this sets up the contrasts so that the intercept in the mixed LMM is the grand mean (i.e., the mean of all conditions)
15 my.coding <- matrix (c(.5, -.5))
16
17 contrasts (DV$Context)<-matrix (c(.5, -.5))
18 contrasts (DV$Sentence)<-matrix (c(.5, -.5))
19
20 #construct the modelswith crossed random effects for subjects and items for the pre-critical, critical and post-crtical regi
21
22 model.full <- lmer (RT ~ Context*Sentence + (1+Context*Sentence |Subject) + (1+Context*Sentence |Item), data=DV, REML=TRUE)
23 model.null <- lmer (RT ~ (1+Context*Sentence |Subject) + (1+Context*Sentence |Item), data=DV, REML=TRUE)
24
25 summary (model.full)
26 lsmeans (model.full, pairwise~Context*Sentence, adjust="none")
27
28 fmodels <- lmer (statement ~ Meaning*Probability + (1+Meaning*Probability |R_c) + (1+Meaning*Probability |Item), data=FPs
```

23:1 (Top Level) R Script

Console ~/Desktop/Air Work/MRes 2016:17/R workshop MRes/R workshop directory/Workshop/

```
The following object is masked from 'package:stats':

    step

> library("lsmeans", lib.loc="/Library/Frameworks/R.framework/Versions/3.3/Resources/library")
Loading required package: estimability

Attaching package: 'lsmeans'

The following object is masked from 'package:lmerTest':

    lsmeans

> model.full <- lmer (RT ~ Context*Sentence + (1+Context*Sentence |Subject) + (1+Context*Sentence |Item), data=DV, REML=TRUE)
```

Error in strsplit(keys, " *, *") : non-character argument

Environment | History

Import Dataset | List

Global Environment

**Data**

| | |
|---|---|
| DV | 1680 obs. of 5 variables |
| my.coding | num [1:2, 1] 0.5 -0.5 |

Files | Plots | Packages | Help | Viewer

Install | Update | Packrat

| | Name | Description | Version |
|---|---|---|---|
| | | Dynamic Report Generation in R | |
| ☐ | labeling | Axis Labeling | 0.3 |
| ☐ | lattice | Trellis Graphics for R | 0.20-34 |
| ☐ | latticeExtra | Extra Graphical Utilities Based on Lattice | 0.6-28 |
| ☐ | lazyeval | Lazy (Non-Standard) Evaluation | 0.2.0 |
| ☑ | lme4 | Linear Mixed-Effects Models using 'Eigen' and S4 | 1.1-12 |
| ☑ | lmerTest | Tests in Linear Mixed Effects Models | 2.0-33 |
| ☑ | lsmeans | Least-Squares Means | 2.25 |
| ☐ | magrittr | A Forward-Pipe Operator for R | 1.5 |
| ☐ | markdown | 'Markdown' Rendering for R | 0.7.7 |
| ☐ | MASS | Support Functions and Datasets for Venables and Ripley's MASS | 7.3-45 |
| ☑ | Matrix | Sparse and Dense Matrix Classes and Methods | 1.2-7.1 |
| ☑ | methods | Formal Methods and Classes | 3.3.2 |
| ☐ | mgcv | Mixed GAM Computation Vehicle with GCV/AIC/REML Smoothness Estimation | 1.8-15 |
| ☐ | mime | Map Filenames to MIME Types | 0.5 |