

- The original analysis on the untransformed data:

```
Fixed effects:
              Estimate Std. Error      df t value Pr(>|t|)
(Intercept)    1568.75      76.24   50.07  20.577  <2e-16 ***
Context1       -36.20      86.01   29.77  -0.421   0.6768
Sentence1      -69.01      39.87   25.93  -1.731   0.0954 .
Context1:Sentence1 -168.73    80.36   25.51  -2.100   0.0458 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

- The new analysis on the log transformed data:

```
Fixed effects:
              Estimate Std. Error      df t value
(Intercept)    7.23975    0.04967 49.13000 145.761
Sentence1       0.01392    0.05278 29.03000   0.264
Context1        0.04316    0.02258 28.62000   1.911
Sentence1:Context1 -0.09333    0.04618 25.55000  -2.021
```

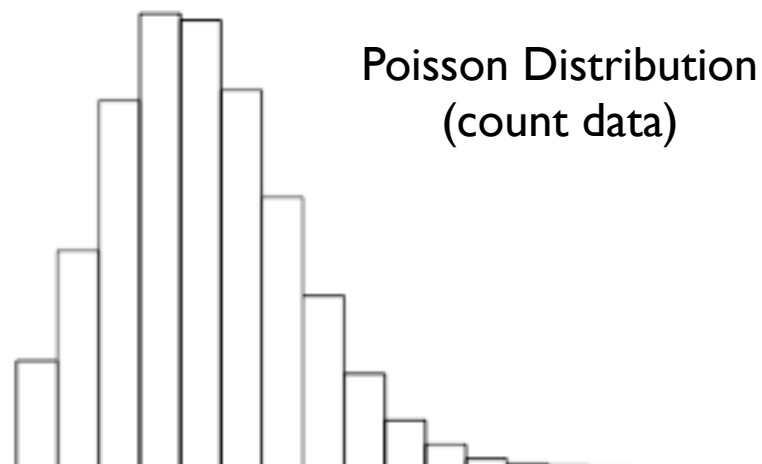
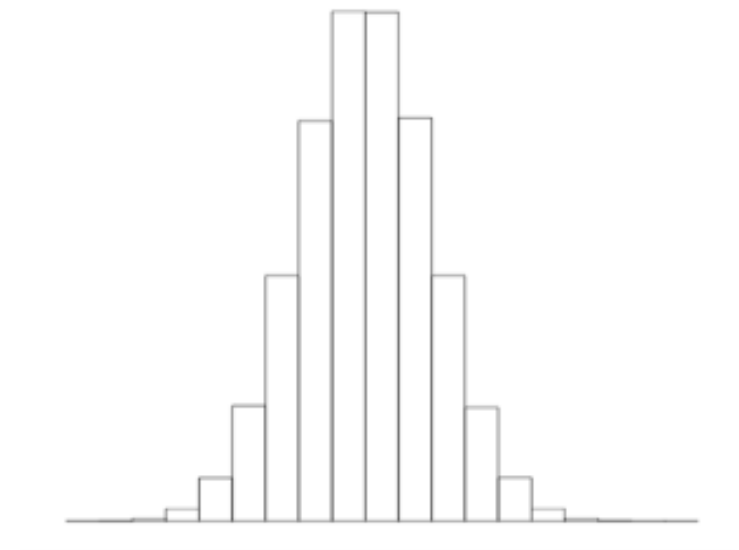
t-value of the interaction smaller than in analysis over untransformed data. With similar dfs, p will be bigger.

Other distributions under the GLMM via the function `glmer` are available...

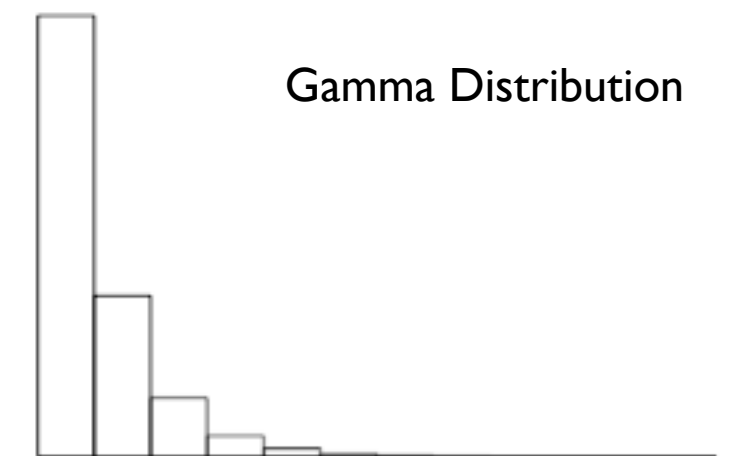
Usage

```
family(object, ...)  
  
binomial(link = "logit")  
gaussian(link = "identity")  
Gamma(link = "inverse")  
inverse.gaussian(link = "1/mu^2")  
poisson(link = "log")  
quasi(link = "identity", variance = "constant")  
quasibinomial(link = "logit")  
quasipoisson(link = "log")
```

Normal (Gaussian) Distribution



Poisson Distribution
(count data)



Gamma Distribution