Prime Without Retrieval: Analysis

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July 6, 2017

1 Analysing Retrieval States

First read the file into an object. If you already have the object, then you don't need to worry about this step:

```
> prime_without = read.csv("Compiled_AllSubjects.csv", header = TRUE, sep = ",")
```

Next, we calculate mean number of states at different levels. Print each object out to see what it contains.

```
> meanstates = group_by(prime_without, TargetQuestion.RESP.Trial.)%>%
+     summarise(count = n())
> meanstates_persubject = group_by(prime_without, Subject, TargetQuestion.RESP.Trial.)%>%
+     summarise(count = n())
> meanstates_prime =  group_by(prime_without, PrimeCondition, TargetQuestion.RESP.Trial.)%>%
+     summarise(count = n())
> meanstates_persubject_prime =  group_by(prime_without, Subject, PrimeCondition,
+                                         TargetQuestion.RESP.Trial.)%>%
+     summarise(count = n())
>
```

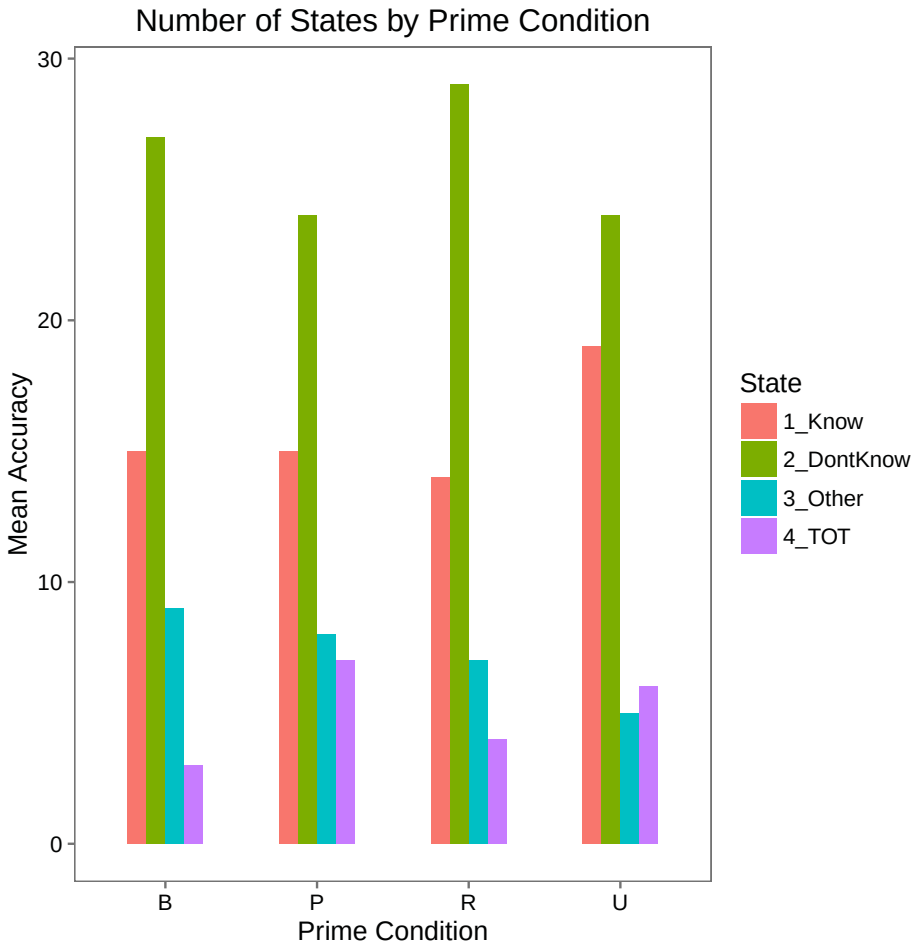
2 Plotting States per Prime Condition

First, we make some changes to our variable and condition names so that they are easy to plot:

```
> colnames(meanstates_prime) = c("PrimeCondition", "State", "Count")
> colnames(meanstates_persubject_prime) = c("Subject", "PrimeCondition", "State", "Count")
> meanstates_prime$State = as.factor(meanstates_prime$State)
> meanstates_prime$State = sub("1", "1_Know", meanstates_prime$State)
> meanstates_prime$State = sub("2", "2_DontKnow", meanstates_prime$State)
> meanstates_prime$State = sub("3", "3_Other", meanstates_prime$State)
> meanstates_prime$State = sub("4", "4_TOT", meanstates_prime$State)
```

Next, we plot the mean number of states per prime condition. We use the group() argument in ggplot to do this:

```
> ggplot(meanstates_prime, aes(x = PrimeCondition, y = Count, fill = State, group = State))+
+  geom_bar(stat = "identity", position = "dodge", width = 0.5)+
+  theme_few()+
+   xlab("Prime Condition") + ylab("Mean Accuracy") +
+   ggtitle("Number of States by Prime Condition")
```


Number of States by Prime Condition
Mean Accuracy
30
20
10
0
B
P
R
U
Prime Condition
State
1_Know
2_DontKnow
3_Other
4_TOT