

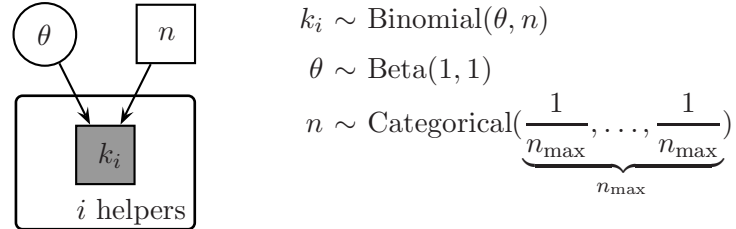
# Bayesian Cognitive Modeling: A Practical Course

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*ERRATA AND UPDATES* AS OF September 18, 2014



**page 51:** Figure 3.12 should have the variable  $n_{\max}$ , not  $m$ , indexing the brace, as in the corrected figure below.

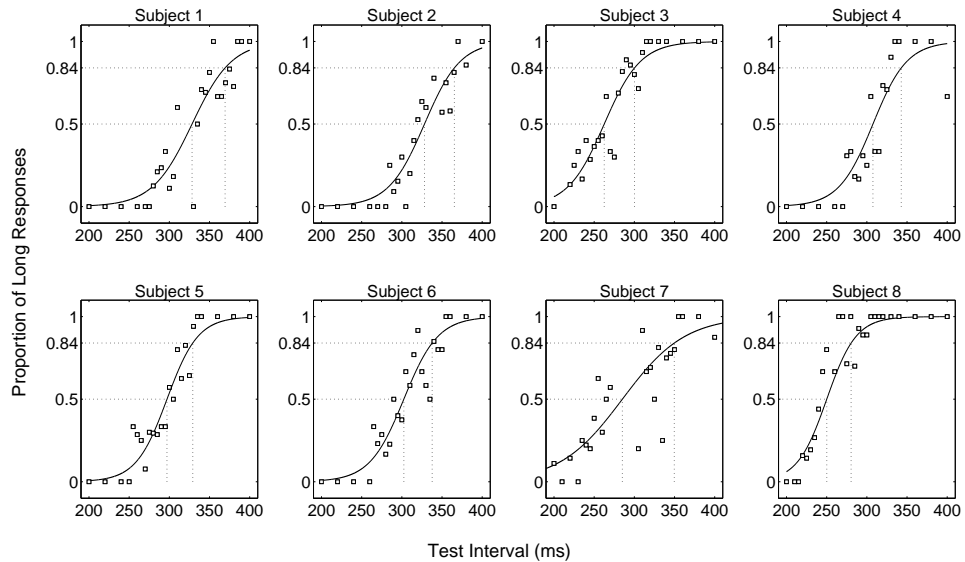


**Fig. 3.12** Graphical model for the joint inference of  $n$  and  $\theta$  from a set of  $m$  observed counts of successes  $k_1, \dots, k_m$ .

**pages 139–140** The text below appears twice consecutively, and should only appear once. Thanks to Guy Hawkins for notifying us of this.

First, note that the posterior for  $\delta$  is not far from being symmetric around zero. If it were completely symmetric, the height of both the prior and the posterior is multiplied by 2, so that their ratio stays the same. Second, the the posterior for  $\delta$  is not quite symmetric around zero, and assigns slightly more mass to values that are inconsistent with  $\mathcal{H}_2$ . This will slightly increase the support for  $\mathcal{H}_0$  over  $\mathcal{H}_2$ . These two considerations lead us to expect that the evidence in favor of  $\mathcal{H}_0$  over  $\mathcal{H}_2$  will be slightly larger than that of  $\mathcal{H}_0$  over  $\mathcal{H}_1$ .

page 172: Figure 12.4 should appear as shown in the corrected figure below.



**Fig. 12.4** Psychophysical functions corresponding to expected posterior parameter values for each of the 8 subjects. Dashed lines represent the JND between the 50% (PSE) and the 84% points.

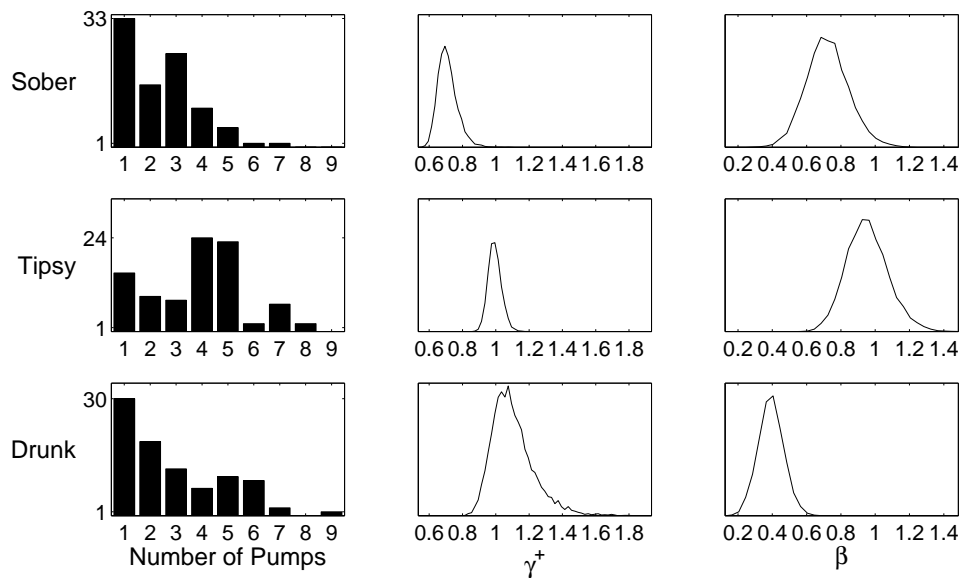
page 183: Figure 13.6 should have the caption shown below.

**Fig. 13.6** Inferred abilities (left-hand panel) and correlation analysis (right-hand panel) for the relationship between performance on the first and second session of the ESP replication experiment.

page 185: Figure 13.8 should have the caption shown below.

**Fig. 13.8** Graphical model for inferring the correlation coefficient between the extraversion of subjects and their performance on the first block of the ESP replication experiment.

**page 211:** Figure 16.5 should show some additional data counts, as in the corrected figure below.



**Fig. 16.6** The number of pump decisions (left panels), posterior distribution for risk propensity  $\gamma^+$  (middle panels), and posterior distribution for behavioral consistency  $\beta$  (right panels) for subject George, in the sober (top row), tipsy (middle row), and drunk (bottom row) conditions.

**page 225:** The sentence should read “The decision made by the  $i$ th subject on the  $q$ th question is  $y_{iq} = 1$  if the first stimulus (stimulus ‘a’) is chosen, and  $y_{iq} = 0$  if the second stimulus (stimulus ‘b’) is chosen.” (i.e.,  $y_{iq} = 0$  not  $y_{ij} = 0$ ). Thanks to Bob Carpenter for notifying us of this.

**page 258:** The correct reference is: Masson, M. E. J. (2011). A tutorial on a practical Bayesian alternative to null-hypothesis significance testing. *Behavior Research Methods*, 43, 679–690.