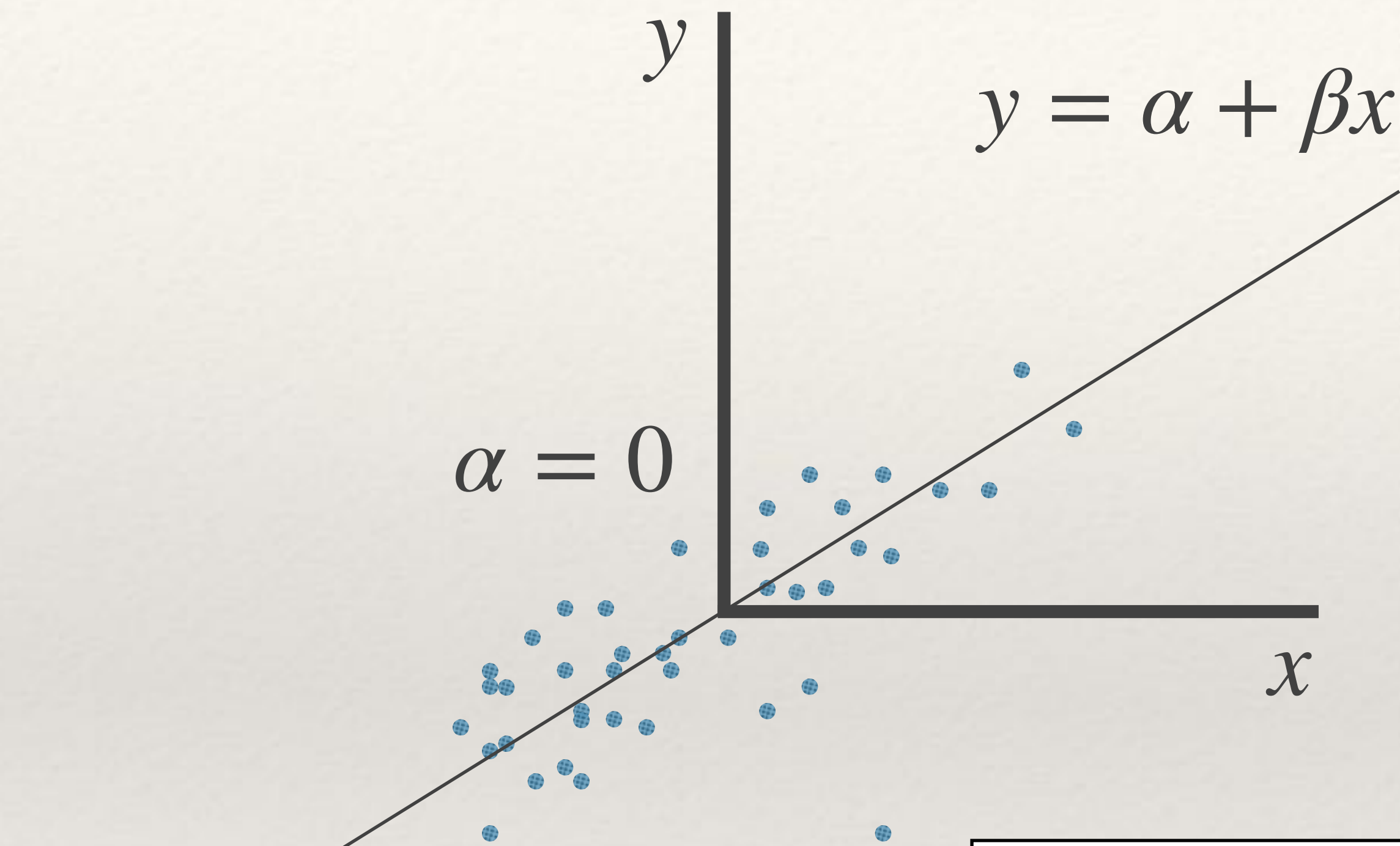
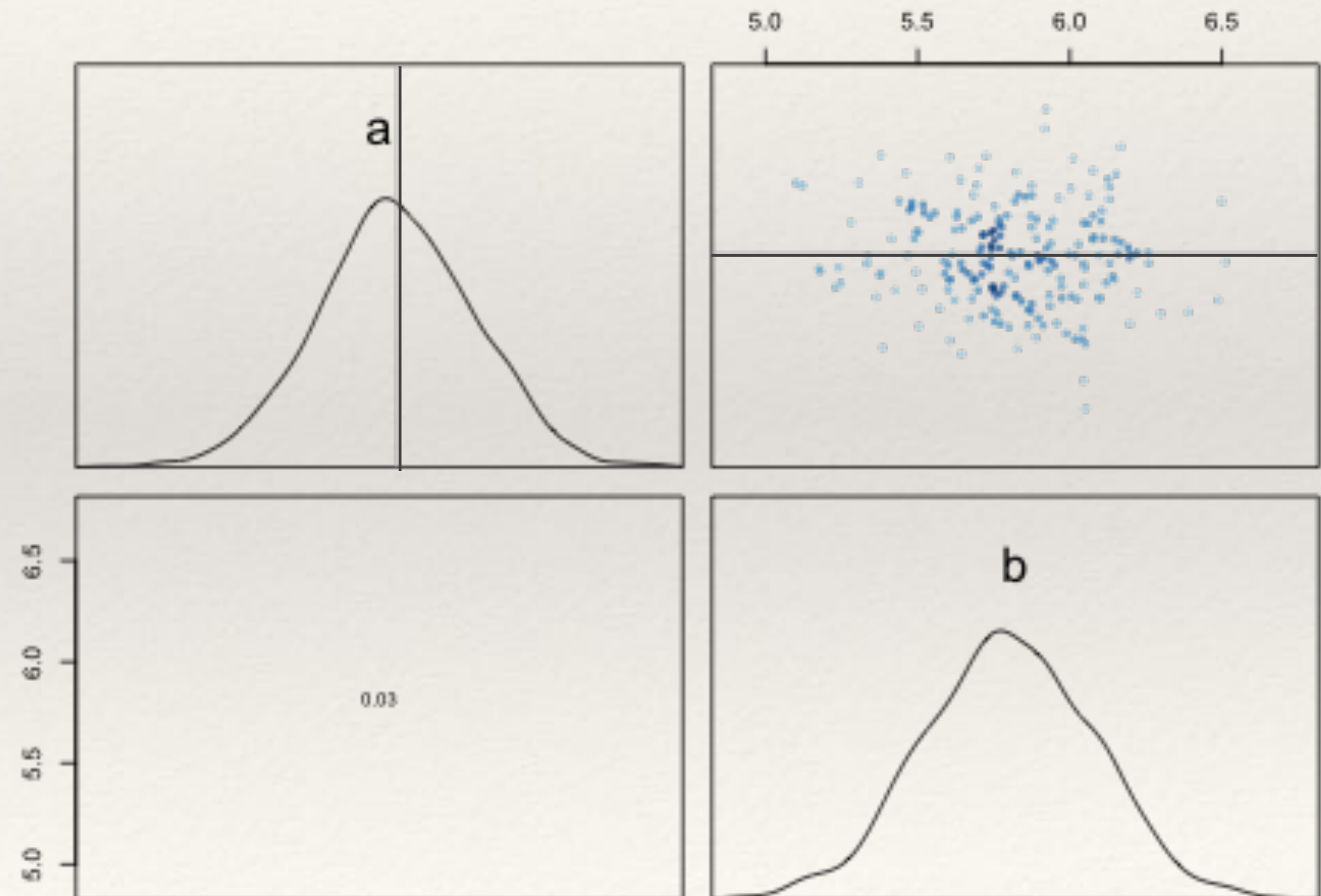


LET'S GET RID OF THESE POSTERIOR CORRELATIONS



$$\tilde{y}_i = y_i - \bar{y}$$
$$\tilde{x}_i = \frac{x_i - \bar{x}}{sd(x)}$$

Pairs plot of the centered model



TAKE HOME MESSAGES

- The posterior distribution contains a lot of useful information not accessible by other methods, all including uncertainty.
- We need to understand the computation methods we use to probe the posterior.
 - Convergence checks are fundamental and can help us diagnose bad models.
 - Stan provides many (many!) tools for model checking.
- There are no true residuals in Bayesian models, but can use posterior simulations to make and understand our predictions.