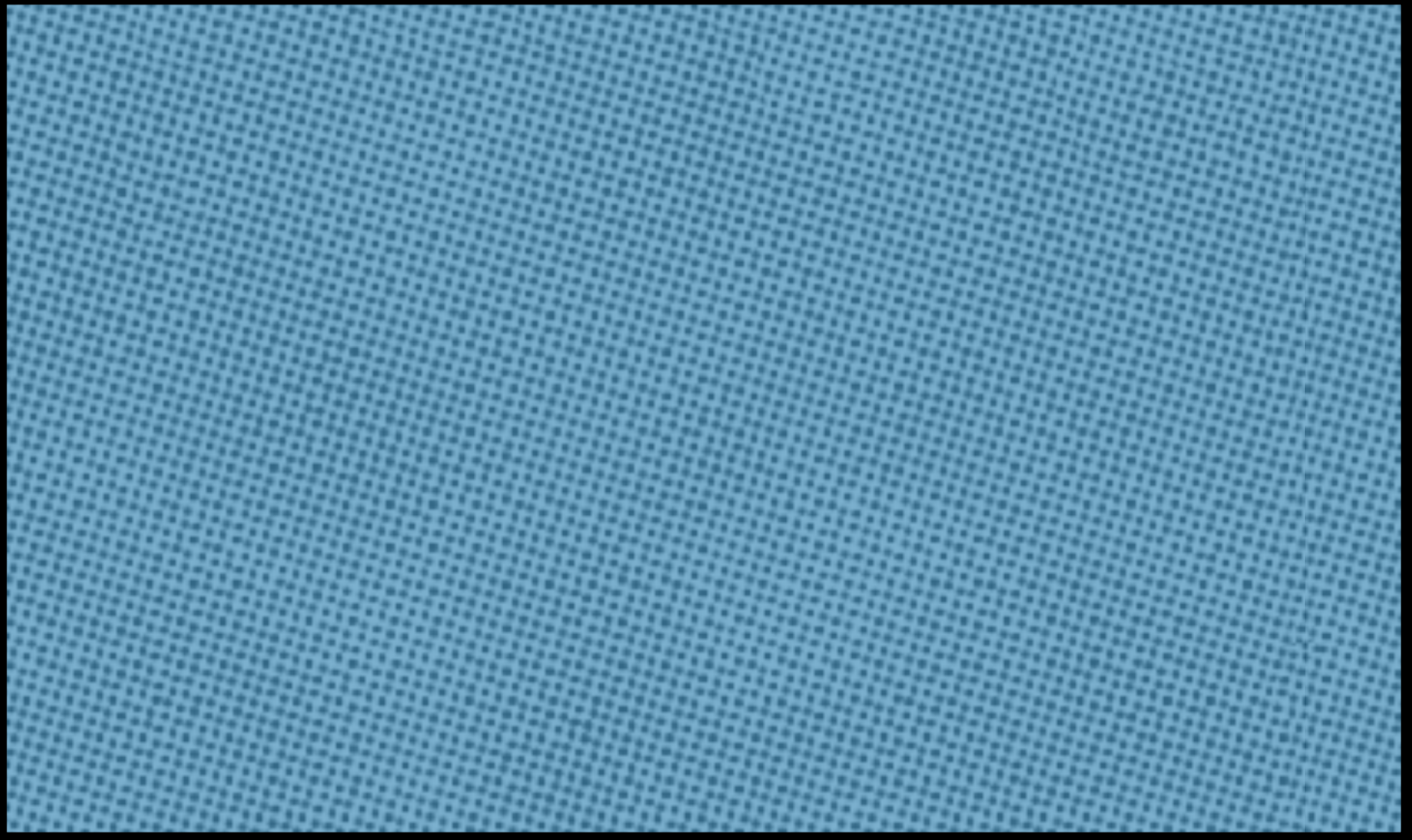
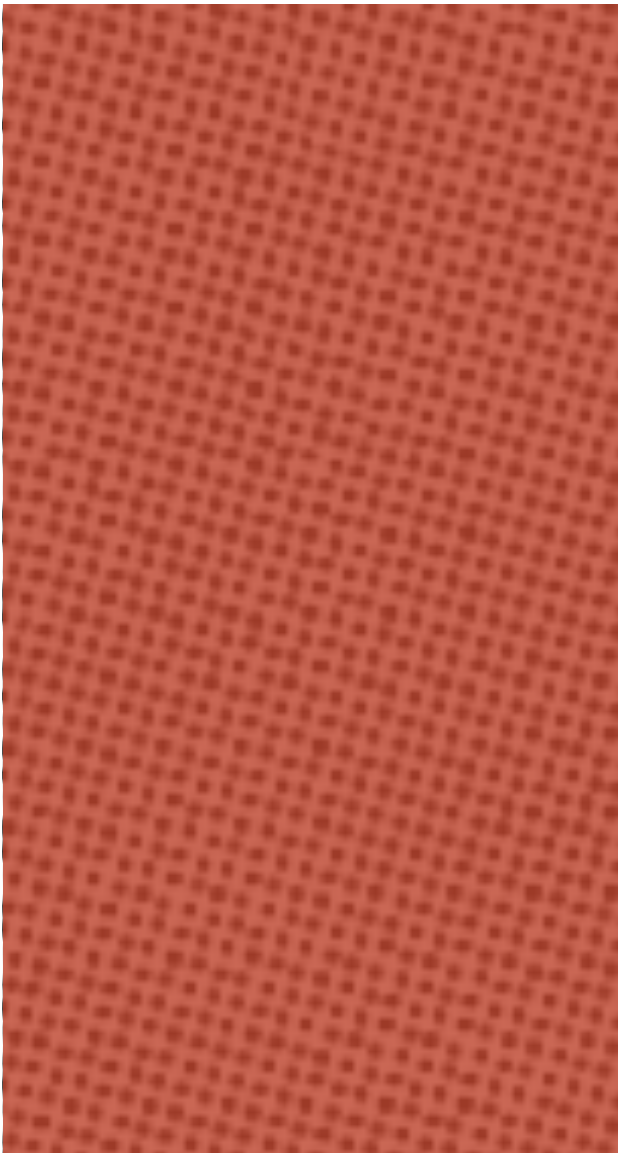
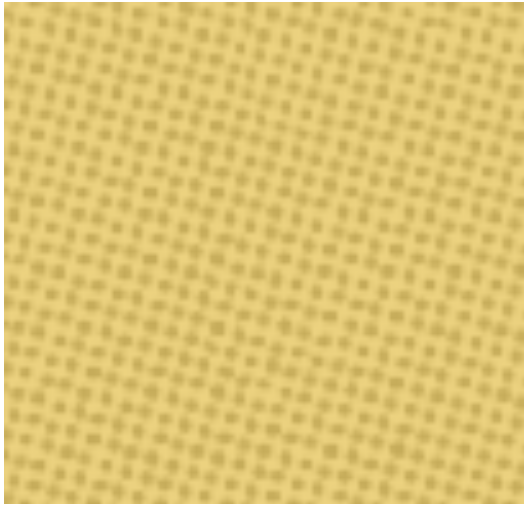
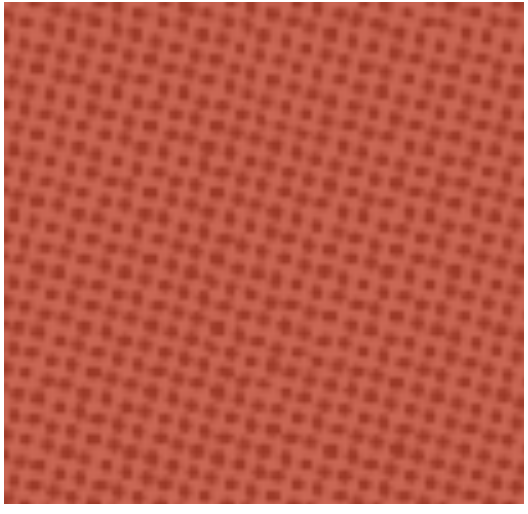
ADDING BLOCKS USING MIXED MODELS

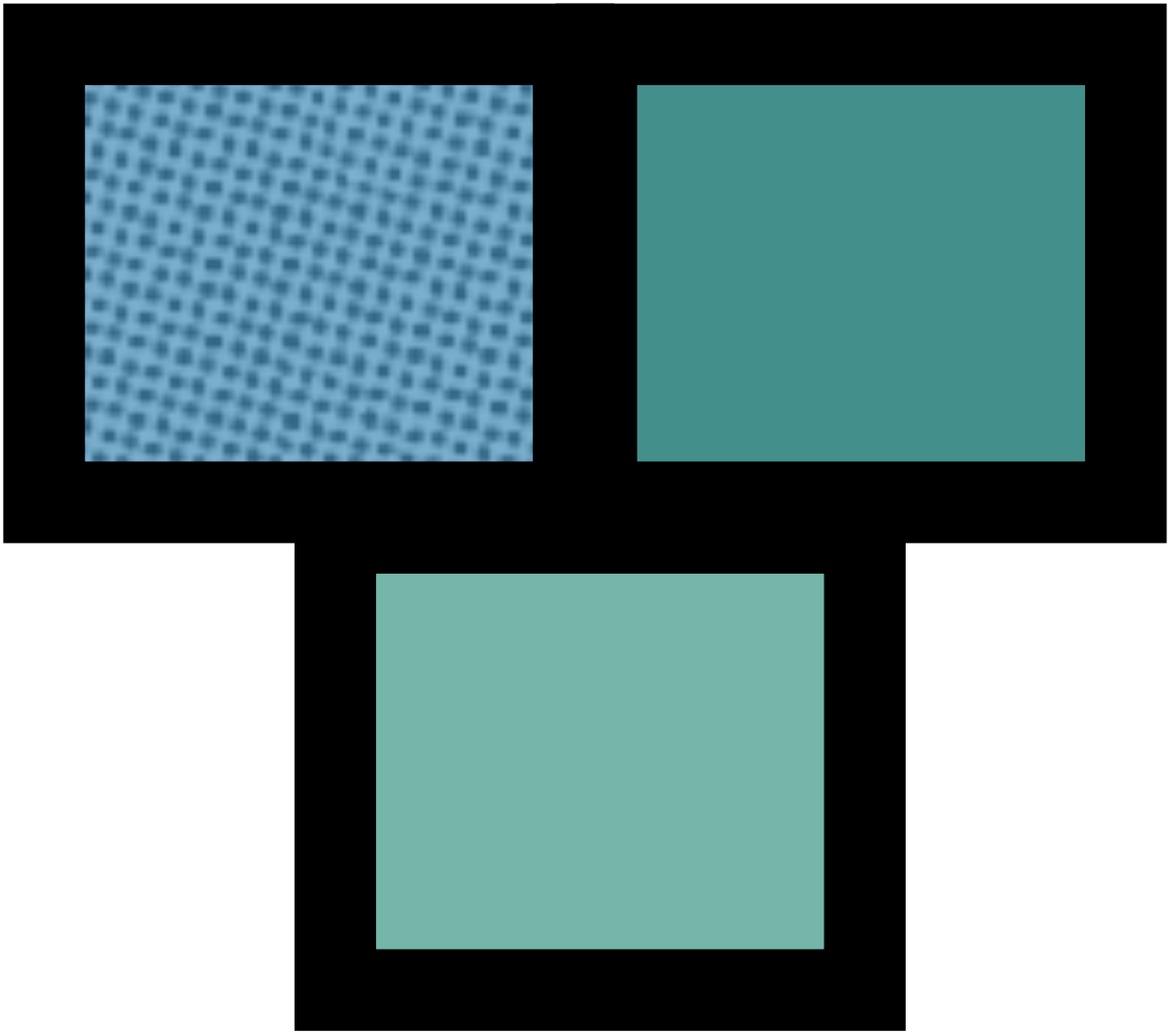


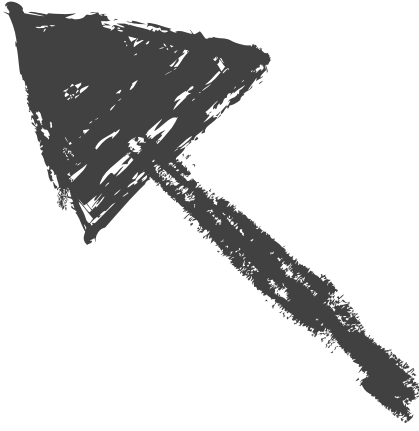


$$
\begin{aligned}
y_i &\sim Normal(\mu_i,\ \sigma) \\
\mu_i &= \alpha_0 + \alpha_{block[i]} + \beta x_i \\
\alpha_k &\sim Normal(0,\ \sigma_\alpha), \text{for } k \text{ in } \{1, \cdots, N_{blocks}\} \\
\alpha_0 &\sim Normal(0,\ 1) \\
\beta &\sim Normal(0,\ 0.3) \\
\sigma,\ \sigma_{block} &\sim Exponential(1)
\end{aligned}
$$

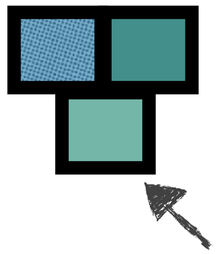








ADDING BLOCKS USING MIXED MODELS



$$y_i \sim Normal(\mu_i,\ \sigma)$$

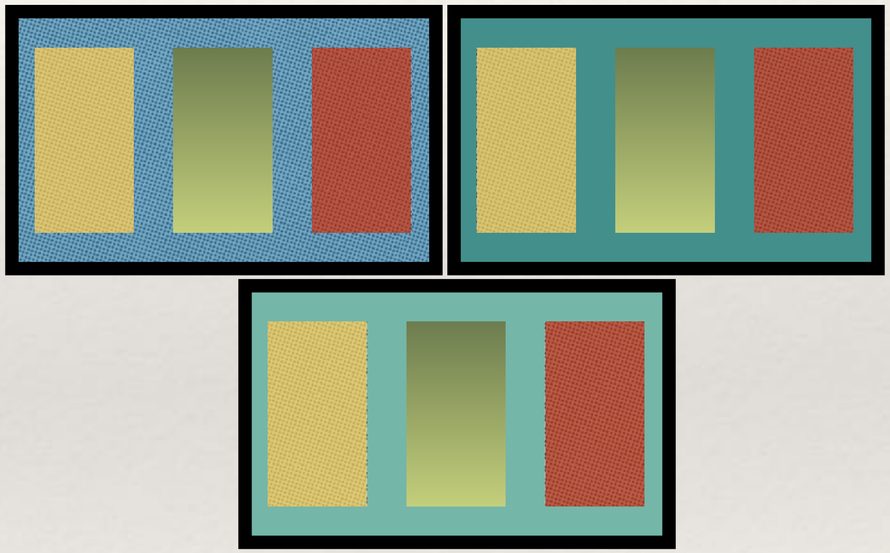
$$\mu_i = \alpha_0 + \alpha_{block[i]} + \beta x_i$$

$$\alpha_k \sim Normal(0,\ \sigma_\alpha), \text{for } k \text{ in } \{1, \cdots, N_{blocks}\}$$

$$\alpha_0 \sim Normal(0,\ 1)$$

$$\beta \sim Normal(0,\ 0.3)$$

$$\sigma,\ \sigma_{block} \sim Exponential(1)$$



BIG EXAMPLE COMING UP!

QUESTIONS?