Figure 2. Simulated latent signal embedded within modality-specific matrices

$$M_j^l = \{eta_1 \cdots eta_K\} egin{bmatrix} a_{11} & a_{12} & \dots \ \vdots & \ddots & \ a_{K1} & a_{KK} \end{bmatrix} egin{bmatrix} p_j \ \vdots & \ddots & \ \vdots & \ddots & \ a_{KN} \end{bmatrix}$$

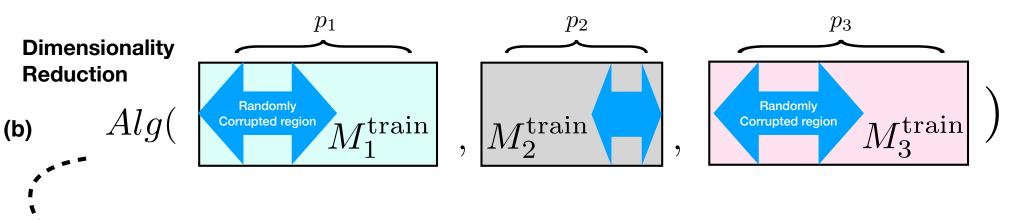
(a) Mixing signal generating row l of n for modality j

Rank-*K* permutation matrix

Rank-*K* modalityspecific signal matrix

(d)

Modality-specific 1D or 2D smoothing kernel



Supervision: 80/20 split

$$lm(\vec{\beta}_1^{\text{train}} \approx \{M_j^{\text{train}} \times V_j\})$$

Prediction & Evaluation

$$lm(\{M_j^{\text{test}} \times V_j\}) \stackrel{R^2}{\longleftrightarrow} \vec{\beta_1}^{\text{test}}$$

Noise level & R-squared signal recovery across methods

