Latent variables W_1 and W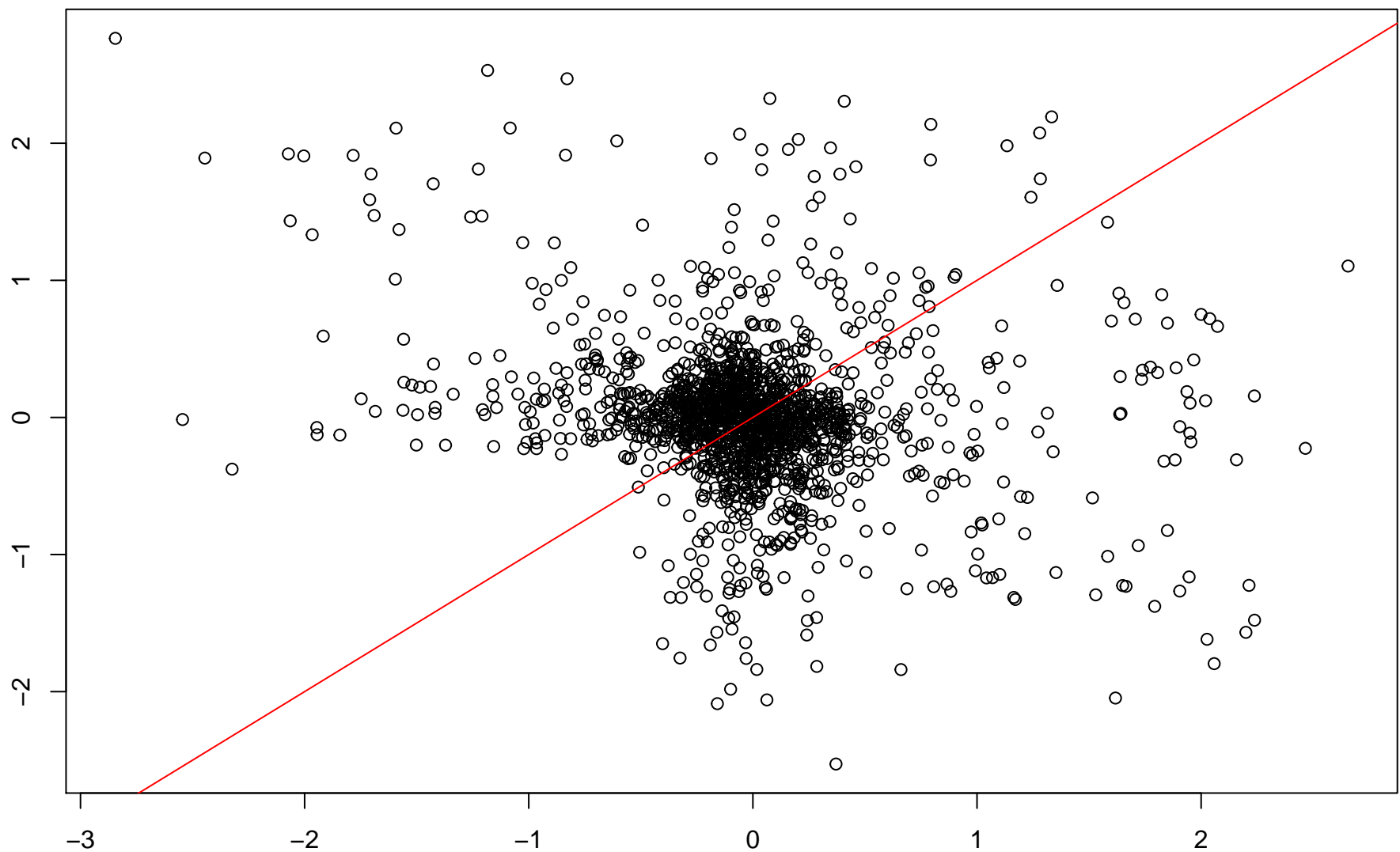_2