



Supplementary Figure 7. Relationship between the magnitudes of change across acoustic features in response to muscimol (a; n=94 syllables types across eight individuals) or bicuculline (b; n=66 syllables types across five individuals). Plotted are the relationships between %change or difference scores for different acoustic features. Relationships were assessed using mixed effects models with the change in one acoustic feature as the predictor, the changes in the other features as responses, and bird ID as a random factor (to account for multiple syllable types measured in each bird). Plots highlighted in light pink indicate relationships that were significant at  $p < 0.05$ , whereas plots highlighted in dark pink indicate relationships that were significant at  $p < 0.01$ .