

Additional correlational analyses between the rates of co-thought and co-speech gestures in  
Experiments 1 and 2

In both Experiment 1 and 2, there were some participants who did not produce any co-thought gestures in the mental rotation task (Experiment 1:  $n = 16$ ; Experiment 2:  $n = 7$ ). One might ask whether the positive correlation between the rates of co-thought and co-speech gestures were mainly because participants who did not produce any co-thought gestures also produced co-speech gestures at a low rate in the motion event description task. To address this concern, we examined the correlation between the rates of co-thought and co-speech gestures in those participants who produced at least one co-thought gestures in the mental rotation task. To increase statistical power, we collapsed data from Experiment 1 and 2.

To avoid influences of outliers, we excluded two participants whose gesture rates were more than 2.5 standard deviations in the mental rotation tasks. No participants' gesture rates exceeded 2.5 standard deviations in the face-to-face or the tape-recorder condition of the motion event description tasks. The rates of co-thought gestures were positively related to the rates of co-speech gesture in the face-to-face condition ( $\rho(36) = .33, p < .05$ ) and in the tape-recorder condition ( $\rho(36) = .26, p = .12$ ). Although the correlation only reached significance in the face-to-face condition, there was a clear trend that the rates of co-thought and co-speech gestures were positively correlated in the tape-recorder condition. Thus, the positive correlations between the rates of co-thought and co-speech gestures were unlikely to be only attributed to those who did not produce any co-thought gesture.