

Typos and Corrections for *Interaction Models: Specification and Interpretation*

1. There is an error in Eq. 5.17. In the book, we wrote

“We now have

$$\text{var}(\hat{Y}_b) = \begin{pmatrix} 0 & 0 & 0 & 40 & 1 \\ 1 & 0 & 0 & 40 & 1 \\ 0 & 1 & 0 & 40 & 1 \\ 1 & 1 & 1 & 40 & 1 \end{pmatrix} \begin{pmatrix} 0.013665 & 0.007221 & -0.013652 & -0.000004 & -0.007031 \\ 0.007221 & 0.075446 & -0.075144 & 0.000069 & -0.010774 \\ -0.013652 & -0.075144 & 0.123598 & -0.000026 & -0.008573 \\ -0.000004 & 0.000069 & -0.000026 & 0.000010 & -0.000505 \\ -0.007031 & -0.010774 & 0.008573 & -0.000505 & 0.032923 \end{pmatrix} \begin{pmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 \\ 40 & 40 & 40 & 40 \\ 1 & 1 & 1 & 1 \end{pmatrix}$$

$$= (0.0084 \quad 0.0077 \quad 0.0679 \quad 0.0426), \tag{5.17}$$

where each element in the resulting row vector corresponds to the variance for the predicted value in one of our four scenarios.”

Of course, the result of this matrix multiplication is not a row vector but a 4×4 symmetric matrix. The four numbers in the row matrix indicated at the end of Eq. 5.17 are correct, but they appear along the main diagonal (top left to bottom right) of the 4×4 matrix.