USING GRAPHS EFFECTIVELY FOR LEARNING FROM DATA

Tables and Figures, IV

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http://polisci.msu.edu/jacoby/iu/graphics
Figure 1: Bivariate scatterplots showing two possible influences on incumbent margin of victory in the 2006 congressional elections.

Figure 2: Three-dimensional scatterplot showing the trivariate relationship between incumbent margin of victory, challenger spending, and incumbent longevity in office.

Figure 3: Adding motion to a three-dimensional scatterplot to enhance visual perception of three-dimensional structure.
Figure 4: Three-dimensional plot showing the OLS surface for the regression of incumbent margin of victory on challenger spending, and incumbent longevity in office.

Figure 5: Three-dimensional plot showing fitted surface for the nonparametric regression (loess) of incumbent margin of victory on challenger spending, and incumbent longevity in office.

Figure 6: Three-dimensional scatterplot showing the trivariate relationship between incumbent margin of victory, challenger spending, and incumbent longevity in office (Figure 2, repeated).

Figure 7: Scatterplot matrix for data on 2006 congressional elections.
Figure 8: Scatterplot matrix with bivariate OLS lines for data on 2006 congressional elections.

Figure 9: Scatterplot matrix with bivariate loess curves for data on 2006 congressional elections.

Figure 10: Creating conditioning slices from variable measuring number of incumbent terms.

Figure 11: Trellis display showing incumbent victory margin versus challenger spending, conditioned on incumbent number of terms in office.
Figure 12: Trellis display showing incumbent victory margin versus challenger spending, conditioned on incumbent number of terms in office (bivariate loess curves added to each panel).

Challenger spending, in $1,000's (logarithmic scale)

Incumbent margin of victory (percentage)

Figure 13: Trellis display showing incumbent victory margin versus incumbent number of terms, conditioned on logged challenger spending (bivariate loess curves added to each panel).

Figure 14: Bivariate scatterplots showing two possible influences on 1992 state policy priorities.

Interest group strength

Policy priority

Size of state government (employees per capita)

Figure 15: Conditioning slices from variable measuring size of state government, with two-thirds overlap between adjacent slices.
Figure 16: The relationship between 1992 state policy priorities and interest group strength within state, conditioned on size of state government (Bivariate OLS line shown within each panel).

Figure 17: The relationship between 1992 state policy priorities and state government size, conditioned on interest group strength (Bivariate OLS line shown within each panel).

Figure 18: Scatterplot matrix for 1992 state policy priority data.

Figure 19: Relationship between 1992 state policy priorities and interest group strength, conditioned on size of state government and electorate partisanship (bivariate OLS line shown in panels).
Figure 20: Relationship between 1992 state policy priorities and state government size, conditioned on interest group strength and electorate partisanship (bivariate OLS line shown in panels).

Figure 21: Relationship between 1992 state policy priorities and electorate partisanship, conditioned on interest group strength and state government size (bivariate OLS line shown in panels).