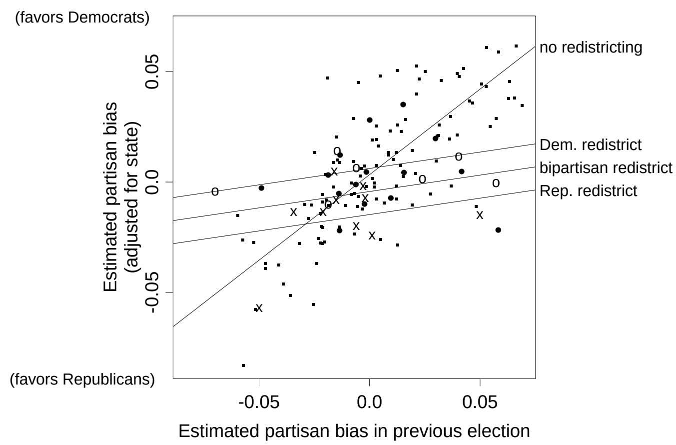

Figure B.3 *Effect of redistricting on partisan bias. Each symbol represents a state and election year, solid circles, open circles, and crosses representing Democratic, bipartisan, and Republican redistricting. The small dots are the control cases—state-years that did not immediately follow a redistricting. Lines show fit from a regression model.*

dots for controls (see Figure B.3). Symbol size can be useful, but it is not always as flexible as one might hope, and we have not had much success in using symbol size for continuous variables.

Color is just great and you should use it as much as possible, even though for printing reasons we do not use color in this book.

We sometimes have had success using descriptive symbol names (for example, two-letter state abbreviations). But if there are only two or three categories, we're happier with visually distinct symbols. For example, to distinguish men and women, we would not use M and W or even M and F. In genealogical charts, men and women are often indicated by open squares and open circles, respectively, but even these symbols are hard to tell apart in a group. We prefer clearly distinguishable symbols—for example, in Figure B.5, open circles for men and solid circles for women.

These suggestions are all based on our subjective experience and attempts at logical reasoning; as far as we know, they have not been validated (or disproved) in any systematic study. We think such a study would be a good idea.

Figure B.3 shows an example of one of the most common regressions: a comparison of treatments to control with a before and after measurement. In this case, the units are state legislative elections, and the plot displays a measure of "partisan bias" in two successive election years. The "treatments" are different kinds of redistricting plans, and the "control" points (indicated by dots on the figure) indicate pairs of elections with no intervening redistricting. We display all the data and also show the regression lines on the same scale. As a matter of fact, we did not at first think of fitting nonparallel regression lines; it was only after making the figure and displaying parallel lines that we realized that nonparallel lines (that is, an interaction between the treatment and the "before" measurement) are appropriate. The interaction is, in fact, crucial to the interpretation of these data: (1) when there is no redistricting, partisan bias is not systematically changed; (2) the largest effect of any kind of redistricting is to bring partisan bias, on average, to near zero. The lines and points together show this much more clearly than any numerical summary.