



**FIGURE 6.4.** The green points show the equivalent kernel  $l_i(x_0)$  for local regression. These are the weights in  $\hat{f}(x_0) = \sum_{i=1}^N l_i(x_0)y_i$ , plotted against their corresponding  $x_i$ . For display purposes, these have been rescaled, since in fact they sum to 1. Since the yellow shaded region is the (rescaled) equivalent kernel for the Nadaraya–Watson local average, we see how local regression automatically modifies the weighting kernel to correct for biases due to asymmetry in the smoothing window.