Fig. 6.4. A Wavelet Tour of Signal Processing, 3rd ed. The convolution $f \ast \bar{\theta}_s(u)$ averages $f$ over a domain proportional to $s$. If $\psi = -\theta'$ then $W_1 f(u, s) = s \frac{d}{ds} (f \ast \bar{\theta}_s)(u)$ has modulus maxima at sharp variation points of $f \ast \bar{\theta}_s(u)$. If $\psi = \theta''$ then the modulus maxima of $W_2 f(u, s) = s^2 \frac{d^2}{ds^2} (f \ast \bar{\theta}_s)(u)$ correspond to locally maximum curvatures.