Fig. 3.2. A Wavelet Tour of Signal Processing, 3rd ed. (a): Signal f and its Fourier transform $\hat{f}$. (b): Aliasing produced by an overlapping of $\hat{f}(\omega - 2k\pi/s)$ for different k, shown in dashed lines. (c): Ideal low-pass filter. (d): The filtering of (b) with (c) creates a low-frequency signal that is different from f.