A Wavelet Tour of Signal Processing
Stéphane Mallat, Academic Press 1999 (2nd edition)

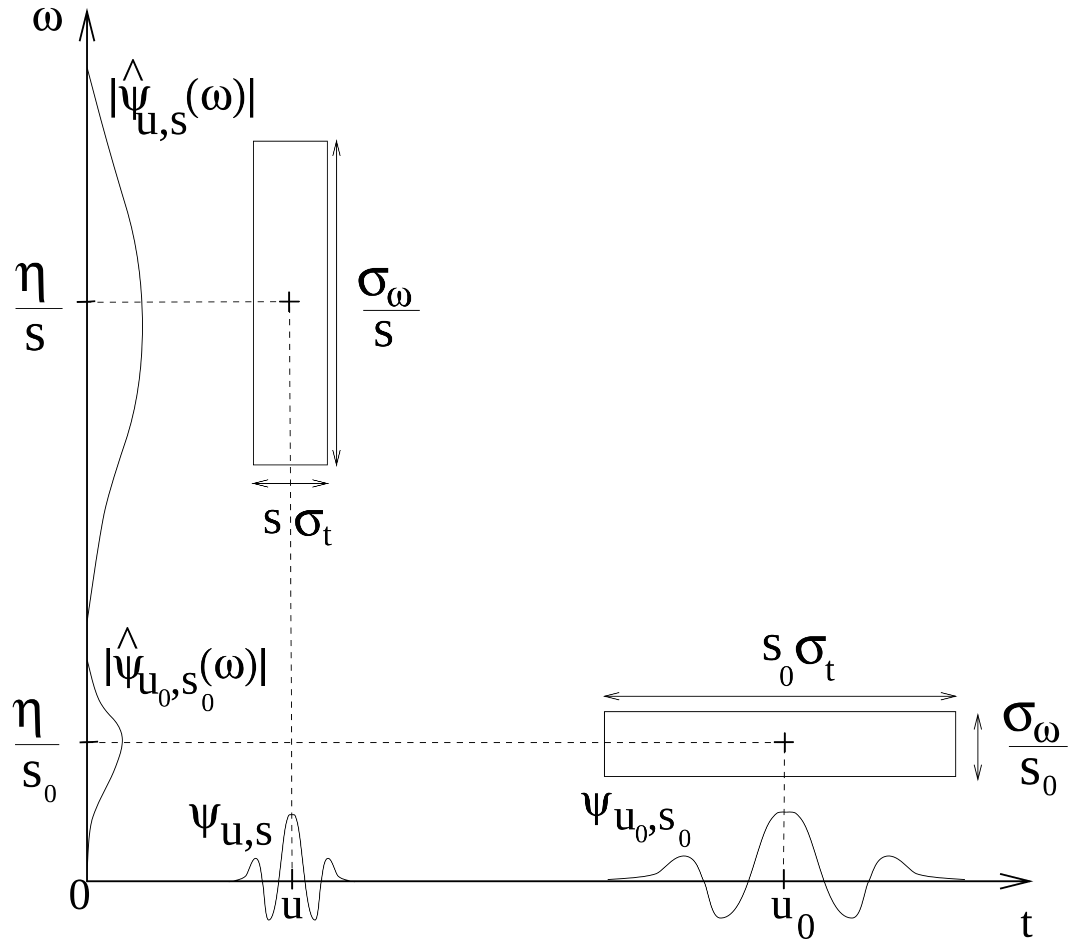

Figure 1.2: Time-frequency boxes of two wavelets $\psi_{u,s}$ and ψ_{u_0,s_0}. When the scale s decreases, the time support is reduced but the frequency spread increases and covers an interval that is shifted towards high frequencies.