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

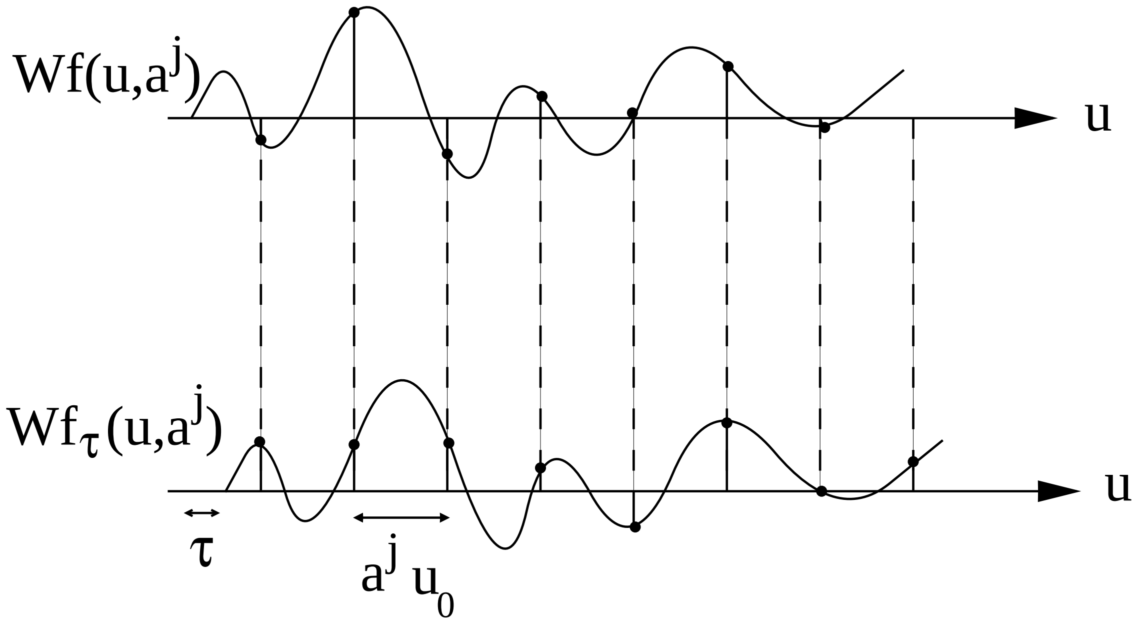

Figure 5.3: If $f_\tau(t) = f(t-\tau)$ then $Wf_\tau(u,a^j) = Wf(u-\tau,a^j)$. Uniformly sampling $Wf_\tau(u,a^j)$ and $Wf(u,a^j)$ at $u = na^j u_0$ may yield very different values if $\tau \neq k u_0 a^j$.