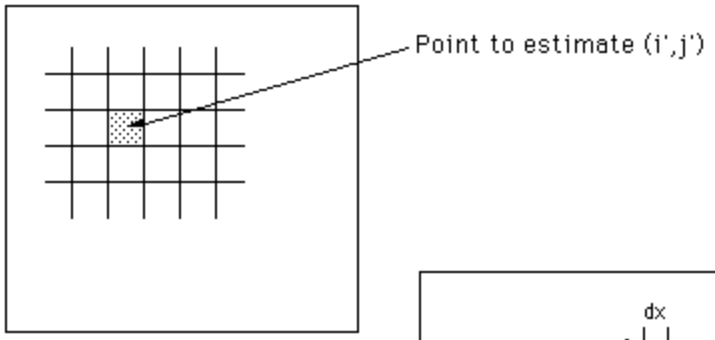
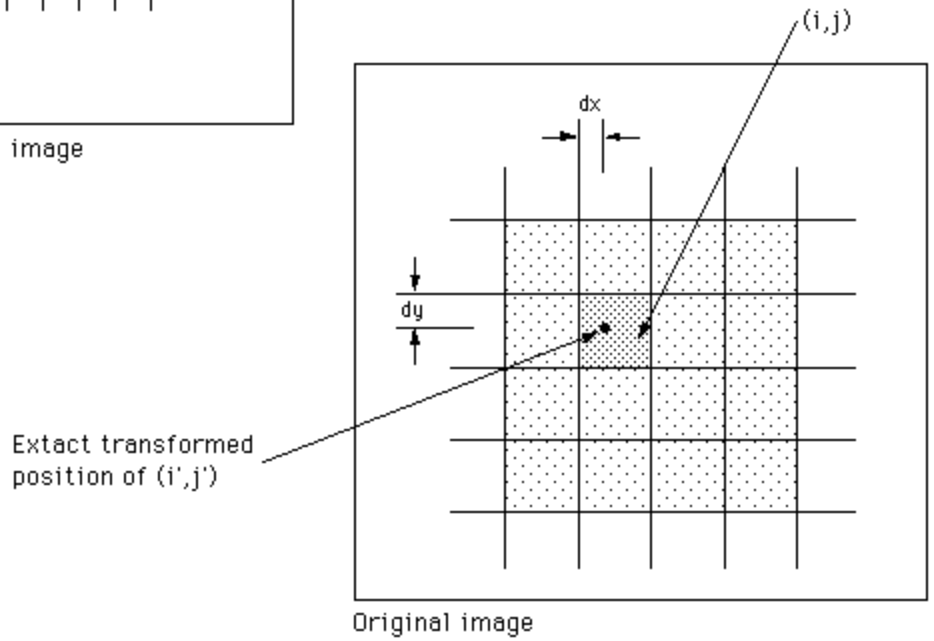
Bicubic Interpolation*



$$F(i',j') = \sum_{m=-1}^{2} \sum_{n=-1}^{2} F(i+m, j+n)\, R(m-dx)\, R(dy-n)$$

$$R(x) = \frac{1}{6}\left[P(x+2)^3 - 4\,P(x+1)^3 + 6\,P(x)^3 - 4\,P(x-1)^3 \right]$$

$$P(x) = \begin{cases} x & x > 0 \\ 0 & x \le 0 \end{cases}$$



http://en.wikipedia.org/wiki/Bicubic_interpolation